

THE  
SOUTHERN REVIEW,

VOL. VI.—No. 12.

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OCTOBER, 1869.

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BALTIMORE:

A. T. BLEDSON, PUBLISHER AND PROPRIETOR.

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
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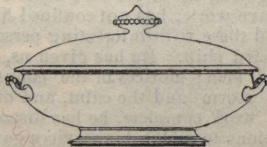
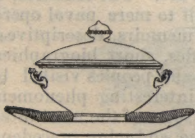
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
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# THE SOUTHERN REVIEW.

No. XII.

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- ART. I.—1. *Annals of Congress*, from 1791 to 1833. Washington City: Gales and Seaton.
2. *Niles's Weekly Register*, from Sept. 7, 1811, to June 27, 1849. Baltimore.
3. *Congressional Globe and Appendix*, from Dec. 7, 1833, to March 4, 1863. Washington City.

The great objection of Henry, Mason, Williamson, Pinckney, Grayson, and other celebrated statesmen, to the new Government, was the oppressions which they believed would be exercised by the Northern majority in the imposition of unequal taxes and burdens on the South. They foresaw and predicted that system of sectional legislation which has since become matter of history. 'This Government,' (i. e., the Constitution of 1787,) said Patrick Henry, 'subjects everything to the Northern majority. Is there not a settled purpose to check the Southern interest? We thus put unbounded power in hands not having a common interest with us. How can Southern members prevent the adoption of the most oppressive mode of taxation in the Southern States, as there is a Northern majority in favor of the Northern States? Sir, this is a picture so horrid, so wretched, so dreadful, that I need no longer dwell



on it.’<sup>1</sup> Again, said he, ‘I am sure the danger is real, when those who have no interest with this country [the South] are to legislate for us; when our dearest interests are left in the hands of those whose advantage it will be to infringe them.’<sup>2</sup> Mr. Mason said: ‘He went on the principle, often advanced, [advanced by every member of the Convention of 1787,] and in which he concurred, that a majority, when interested, would oppress a minority. . . . If we compare the States in this point of view, the eight Northern States have an interest different from the Southern States; and have, in one branch of the Legislature, thirty-six votes against twenty-nine, and in the other in the proportion of eight to five. The Southern States had therefore grounds for their suspicions.’<sup>3</sup> ‘The Southern States,’ said Mr. Williamson, ‘must be extremely endangered by the present arrangement. The Northern States are to have a majority in the first instance, with the means of perpetuating it.’<sup>4</sup> ‘If the Southern States,’ said Mr. Pinckney, ‘are to form so inconsiderable a minority, and the regulation of trade is to be given to the General Government, they will be nothing more than overseers for the Northern States.’<sup>5</sup> ‘The interests of the carrying States,’ said Mr. Grayson, ‘are strikingly different from those of the productive States. . . . The carrying States will assuredly unite, and our situation will then be wretched indeed. We ought to be wise enough to guard against the abuse of such a Government. Republics, in fact, oppress more than monarchies.’<sup>6</sup> All these sage counsels and solemn warnings were unheeded. The interests of the South were entrusted to the moderation, wisdom, and justice of the North; and the result predicted by Henry, Grayson, and others, became history. The wealth of the South, by far the most prosperous and flourishing section of the Union at the time the new Government went into operation, fell a prey to the injustice of the Northern majority. The words of Grayson, that the Northern States, being in the majority,

<sup>1</sup> Elliot's Debates, Vol. III. p. 273.      <sup>4</sup> Ibid., p. 1058.

<sup>2</sup> Ibid., p. 289.

<sup>5</sup> Ibid., p. 1058.

<sup>3</sup> Madison Papers, p. 1387.

<sup>6</sup> Elliot's Debates, Vol. III. p. 273.

would exchange their poverty for the wealth of the South, were literally fulfilled. The principal means by which this legislative robbery was effected, was that stupendous system of protective tariffs, by which the prosperity and power of the North were built up at the expense of the South.

In 1791, Alexander Hamilton, as Secretary of the Treasury, recommended and advocated the system of protection in his celebrated Report; and the Bill by which it was first established was introduced into Congress by James Madison. Thus, the chief fathers of the Constitution, were the authors of the scheme of protective duties. From this fact, it has been inferred, that the power to protect manufactures is found in the Constitution; since it is not to be supposed, for a moment, that the authors of that instrument could have been ignorant of its provisions, or indifferent to the solemn obligations it imposed. Mr. Madison himself uses this argument in favor of the constitutionality of protective tariffs. But however imposing this argument from authority, it may, it is believed, be shown to be as hollow and deceptive as the system it has been adduced to justify. With Americans, when the Union was supposed to be in the full blast of a glorious success, this argument carried every thing before it, and was well-nigh omnipotent. But that period has passed. The time foreseen and predicted by Mr. Madison himself has now arrived. The system of protective duties, as well as the Constitution itself, has been 'judged by the opinion men entertained of its authors;' those authors themselves will henceforth be judged by their opinion of that system. If, upon examination, it shall be found to be the most unequal, unjust, and unconstitutional scheme of taxation the modern world has seen, the names of Hamilton and Madison will not be able to save it from reproach.

If we examine the history of this scheme, we shall be struck with the very remarkable fact that neither Hamilton, in the famous Report by which it is recommended, nor Madison, in the Congress to which he proposed it, made any allusion whatever to any provision of the Constitution under which they acted, and which they were bound by their oaths to observe and support. The constitutionality of the measure, the most



vital and fundamental of all the questions pertaining to the subject, was neither mooted nor discussed by them. In the Report of 1791, Hamilton first proceeds to argue the expediency of the measure; as if the Constitution created by himself and Madison had never been called into existence. The work of his own hands was as perfectly ignored by him, as if it had been made for the government of some foreign republic, or printed for waste paper only. With him, the question of expediency seems to have been every thing; and the question of constitutional power, or right, absolutely nothing. What could more clearly demonstrate the infinite absurdity of making a constitution to order, and then reducing it to writing, for the government of a great and growing commonwealth? The very authors of the Constitution itself completely ignored its existence, and treated it with silent contempt, in the prosecution of their favorite schemes! Nor, from that day to this, has the constitutionality of protective tariffs received that careful and full consideration which its importance demands. After a hasty and superficial investigation, most eloquent speeches, or speeches deemed most eloquent, have been made in the Congress of the United States on the subject of the unconstitutionality of such tariffs, and these speeches have found ten thousand echoes in the great Republic. But, after all, the question still remains to be examined, in the light of history and of the Constitution itself. Where, then, shall we find in the Constitution of the United States, as actually made and reduced to writing, the power, or authority to institute the system of protective tariffs?

The Government of the United States is, in theory at least, one of limited powers. It can exercise no right, or power, or authority, except those which are granted in and by the Constitution of the United States. No principle is more clearly established, or more universally recognized, than this. In the *Federalist* itself, Alexander Hamilton, with every other expounder of the Constitution, expressly declares, that 'the rule that all authorities, of which the States are not explicitly divested in favor of the Union, remain with them in full vigor . . . is clearly admitted by the whole tenor of the instrument

which contains the articles of the Constitution.<sup>7</sup> Thus, according to Hamilton himself, the States retain in full vigor all powers and authority not granted by them to the Union; and the General Government can exercise only those powers which are granted in and by the Constitution. This is the grand charter, and the sole repository, of all its powers; beyond whose limits the General Government has no right to travel a single inch. It must, then, find in that written instrument the power it exercises; or else it perpetrates a usurpation in direct and open violation of the very law of its existence. Where, then, shall we find the power of the General Government to introduce and to build up the system of protective tariffs? Did Alexander Hamilton, the reputed father of the protective policy, find this power in the Constitution of the United States? Did he even condescend to look for it there? If so, he kept the secret to himself, and left others to trouble themselves, or to be troubled, with constitutional scruples or obligations. If, on this most vital and fundamental point, he had any light, he most carefully concealed it under a bushel; leaving his successors to grope in the dark, or to find those lights that were most pleasing to their own eyes. In New England, at least, as we shall soon discover, those lights, respecting the Constitution, were invariably the most pleasing to the eye, which were most profitable to the pocket. Its great oracle, or rather its great mouth-piece, Daniel Webster, contended, in 1816 and in 1824, that protective tariffs were clearly unconstitutional. In 1828, he not only admitted their constitutionality, but poured forth his eloquence in vindication of the system and of his own consistency; both, as it will be seen, most desperate undertakings.<sup>8</sup>

<sup>7</sup> No. XXII.

<sup>8</sup> Mr. Webster was, indeed, consistent; but the principle of his consistency was very different from what he would have us to believe. This was not a regard for the Constitution, but for the will of his constituents. Their clamors were never lost upon him. When, in 1816, they clamored against protection, as inimical to their commercial interests, he pronounced the system unconstitutional; and when, in 1828, they clamored for more protection, he saw the Constitution in a new light, and became a sudden convert to the very scheme he had demolished in 1824 as at war, not only with the Constitution, but with every principle of equal and just legislation, as well as with the whole spirit and tendency of the age. Such was precisely the unvarnished nature of his consistency. The miserable pleas by which he endeavors to put a gloss upon it, will hereafter be examined, and their utter flimsiness exposed.



The system of protective tariffs in America, like most other abuses and usurpations of government, crept in by slow degrees, and under color of patriotic motives. So true is this, that Hamilton himself, the author of the system, was far less of a protectionist than the most determined advocate of free-trade in after times. This will, no doubt, seem like a violent paradox to American politicians; who, for the most part, have paid as little attention to the political history of their country, as to the Constitution they were appointed to guard and to preserve inviolate. But it is, nevertheless, strictly and literally true. Alexander Hamilton, at whose door all subsequent abuses of the system of protection have been laid by the one party, and whose authority has been quoted in favor of those abuses by the other party, was far less of a protectionist than John C. Calhoun himself. The tariffs of 1824 and 1828 were, in reality, more utterly repugnant to the principles of Hamilton, as laid down in the *Federalist*, than to those of the great Carolinian, who waged an uncompromising war against them as 'bills of abominations.' 'It has been my fate,' said Mr. Calhoun in 1833, 'to occupy a position as hostile as any one could to the protective policy.' The truth is, however, that, in 1788, Hamilton himself occupied a position far more hostile to that policy. That is, the great champion of free-trade in 1833, was decidedly more of a protectionist, than the great advocate of protection itself in 1788; so stupendous had the abuses of this system become, and so irresistible its influence over the minds of politicians! All men were, in fact, dragged at the wheels of this triumphal system; so that the extreme free-traders of to-day are found in advance of the extreme protectionists of yesterday. John C. Calhoun himself is, in the line of protection, far in advance of Alexander Hamilton.

This may be easily proved. Mr. Calhoun, as every one knows, admitted the propriety of raising tariffs to the full revenue standard, with discrimination in favor of incidental protection to manufactures. This was the free-trade doctrine of his day. But, in favor of protection itself, it shoots far beyond the doctrine of Alexander Hamilton. In the *Federalist*,<sup>9</sup>

Hamilton insists that if tariffs, or duties on imports, should be raised to the revenue standard, this would be unjust, because it would lay too great a portion of taxation on 'the non-manufacturing States.' 'The confinement of the national revenues,' says he, 'to this species of imposts, would be attended with inequality, from a different cause, between the manufacturing and the non-manufacturing States. The States which can go farthest towards the supply of their own wants, by their own manufactures, will not, according to their numbers or wealth, consume so great a portion of imported articles, as those States which are not in the same favorable situation. They would not, therefore, in this mode alone, contribute to the public treasury in a ratio to their ability. To make them do this, it is necessary that recourse be had to excises; the proper objects of which are particular kinds of manufactures.' Now here it is distinctly and emphatically declared, that if tariffs, or duties on imports, should be raised to the revenue standard—a thing never contemplated by the fathers of the Constitution—this would be too great a benefit to the manufacturing States, and too great a burden on the non-manufacturing States. In order to prevent this inequality, said he, it is necessary that recourse be had to direct taxation, and that all the revenues of government be not raised by imposts alone. The tariff, said Mr. Calhoun, may be raised to the revenue standard; or, in other words, all the revenues of the Government may be raised by duties on imports alone. This, said Hamilton, would be attended with an inequality between the manufacturing and the non-manufacturing States, which should not be tolerated. Yet Mr. Calhoun, and the whole South, were in favor of bearing this degree of inequality in favor of the manufacturing States of the Union. But this did not satisfy the rapacity of the North. On the contrary, she insisted that the tariff, or duties on imports, should be raised far above the revenue standard, and for the express purpose of protecting her manufactures; regardless of the unequal and crushing burden this imposed on the South. Hamilton, as we have seen, wished the manufacturing States to share as equally as possible, by means of excises or direct taxation, the burdens of government, as well as its bene-



fits. The manufacturing States themselves, however, decidedly preferred its benefits to its burdens; and as eagerly sought a monopoly of the one, as they shunned a due portion of the other. Hence, the non-manufacturing States of the South were most unequally taxed, by means of a tariff raised far above the revenue standard, not only to support the General Government, but also to enrich the manufactures of the North.

A revenue tariff was, as we have seen, pronounced by Hamilton an extreme and unjustifiable measure. He argued, that so extreme a tariff, or one so unequal in its operation, could never be enacted under the Constitution of the United States, which expressly declares, that 'all duties, imposts, and excises shall be uniform throughout the United States.' 'The abuse of this power of taxation,' says he, 'seems to have been provided against with guarded circumspection. In addition to the precaution just mentioned, there is a provision, that "all duties, imposts, and excises shall be UNIFORM throughout the United States."' But what cares a rampant majority for a naked provision of the Constitution, or a simple rule of justice? Without the power to enforce such a provision, or to cause such a rule to be observed, it is not worth the paper on which it is written. A Hamilton may print it in capitals, as he did, and hold it up before the eyes of such a majority; but still it will be as completely forgotten as if it had never existed. In fact, this provision of the Constitution, this rule of pure justice, was entirely lost sight of by those engaged in the construction of tariffs, or in the imposition of imposts. Not one of them ever dreamed of making the burden of taxes bear as equally as possible on all parts of the Union. On the contrary, the protection of manufactures, about which the Constitution says nothing, became the grand object of such legislators, and the uniformity, or equality, of taxation prescribed in that instrument became a dead letter. A letter so dead, indeed, that it was trampled under foot and treated with contempt by one party, and not even quoted by the other! Was not the illusion of such a man as Hamilton truly wonderful? What! the abuse of the power of taxation provided against with guarded circumspection, by a simple rule of justice announced

in a printed paper, called a Constitution! With all his abhorrence of democracy, and with all his vivid conceptions of its 'amazing violence,' Hamilton did not begin to comprehend the depths of its rapacity, nor the infinite meanness of its injustice; that is, if he really believed it would observe such a provision. It required, indeed, the grand experiment of the New World to reveal the mysteries of its iniquity; and to show that, in its estimation, Constitutions and oaths are lighter than the small dust of the balance. Such 'paper checks,' intended to control and restrain an interested majority, were more truly regarded by Patrick Henry as a 'ridiculous farce,' and so pronounced by him in the ratifying Convention of Virginia.

'So far,' says Hamilton, 'as these observations tend to inculcate a danger of the import duties being extended to an injurious extreme, it may be observed, conformably to a remark made in another part of these papers, that the interest of the revenue itself would be a sufficient guard against such an extreme.'<sup>10</sup> The interest of the revenue! What, in the estimation of the North, was the interest of the revenue, when placed in the balance against the interest of the pocket? It was just nothing at all. The interest of the revenue was, indeed, scarcely dreamed of, amid the grand schemes of sectional legislation.

In the *Federalist*, Hamilton has, in advance, condemned the tariffs of 1824, 1828, and 1832; all of which transcended the revenue standard; a standard always deemed too high by him. 'Suppose,' . . . said he, 'the federal power of taxation were to be confined to duties on imports; it is evident that the government, for want of being able to command other resources, would frequently be tempted to extend these duties to an injurious excess.' But the federal power of taxation was not confined to duties on imports; it also embraced excises, by which the burdens of the General Government might have been rendered equal and just and constitutional; and yet, instead of this, and without the temptation in question, the duties on imports were extended to a most injurious excess. 'There are persons,' continues Hamilton, 'who imagine that

<sup>10</sup> *Federalist*, No. XXII.



this can never be the case,' (even if the power of direct taxation were denied to the General Government,) 'since the higher they are, the more, it is alleged, they will tend to discourage an extravagant consumption, to produce a favorable balance of trade, and to promote domestic manufactures. But all extremes are pernicious in various ways. Exorbitant duties on imported articles serve to beget a general spirit of smuggling; which is always prejudicial to the fair trader, and eventually to the revenue itself: *they tend to render other classes of the community tributary, in an improper degree, to the manufacturing classes, to whom they give a premature monopoly of the markets.*'<sup>11</sup> No better free-trade doctrine can be found in the writings, or speeches, of Calhoun himself. Indeed, Calhoun approved the revenue standard for a tariff, while Hamilton pronounced that standard too high; because it would be a 'premature monopoly' in favor of the manufacturing States.

The celebrated Report of Hamilton has been more talked about than read. It has been most extravagantly praised by one party, and condemned by the other; but it seems to have been read by neither. If it had been examined by them, the protectionists of a later day would have found therein their own utter condemnation, and they would have blushed, (if blush they could,) to quote him as an authority in favor of even a revenue tariff; and the advocates of free-trade of the same date would have seen in its author a most powerful champion of their own principles. A more wisely considered, a more profound and sagacious paper, never issued from the pen of an American statesman. We scarcely know which the more to admire in this production, the profound theoretical views of its author, or his deep practical wisdom. The enormous, unjust, unconstitutional, and oppressive tariffs of a later day were enacted in utter ignorance, or contempt, of the doctrines of Hamilton; who was, however, always quoted as an authority in their favor. With all his faults, Hamilton would have shrunk with horror from the legislative robbery of such tariffs, by which the manufacturing States of the North were enriched at the expense of the agricultural States of the South.

<sup>11</sup> *Federalist*, No. XXXV.

Mr. Webster was the first American statesman to discover the unconstitutionality of protective tariffs. In 1816, in 1820, and in 1824, he stood up for the Constitution, and denounced the injustice of the protective policy. But then, during all that time, 'the great expounder of the Constitution' was supported by his constituents. Commerce formed, at that time, the chief interest of Massachusetts, and of other New England States. The protective policy would, therefore, by excluding foreign merchandise from the American market, interfere with their carrying trade, as well as with the profits of their commerce. Hence, 'the great expounder' could, by the most irrefragable arguments, demonstrate, not only the impolicy, but the *unconstitutionality*, of protective tariffs. His splendid effort in 1824 in favor of free-trade failed, however, to convince the Senate of the United States; and consequently the high protective tariff of that year was established. The four succeeding years wrought wonders. The New England States, foiled in their design to defeat the protective policy as unjust and unconstitutional, at once determined to profit by the iniquitous system, and turned their attention to the development of their manufacturing interests. Massachusetts, having tasted the sweets of protection, wished to drink still more deeply at the same fountain of Southern wealth, which, in the language of Mr. Benton, that policy caused to 'flow northwardly in one uniform, uninterrupted, and perennial stream.' Ay, she not only wished to deepen and to widen the stream, but also to quicken its flow northwardly, in order that she might drink her fill and be satisfied. Hence, not content with the enormous tariff of 1824, under which her manufactures were growing and flourishing, she clamored for more protection; and therefore 'the great expounder,' 'the God-like Daniel,' as she delighted to call her most eloquent mouth-piece, stood up for his constituents, and left the Constitution to take care of itself. Although he had pronounced the comparatively moderate tariffs of 1816 and 1824 unequal and unconstitutional, he advocated that 'bill of abominations,' the tariff of 1828.

Yet, in the face of all this, Mr. Webster contends that he was consistent with himself, as well as true to the Constitution



he had sworn to support. But how could this be? The Constitution certainly had not changed; and if there had been no change in Mr. Webster, how could he, at the same time, support both the Constitution and the tariff of 1828? Mr. Webster endeavors to explain this enigma, and clear up the consistency of his course. Let us see, then, how he vindicates his own character, as a conscientious and consistent statesman. As a conscientious statesman!

‘As an original question,’ says he, ‘the system of protective tariffs still appears unconstitutional; but then this question has been settled by the practice and policy of the Government. Hence it becomes every true and loyal citizen to submit.’ Specious pretext! Plausible defence! But yet, upon examination, it will be found as shallow as it is specious, as hollow as it is plausible. The protective policy was either not an open question in 1824, or it was so in 1828. This policy was, as we have seen, introduced by the very first Congress of the United States, with Alexander Hamilton and James Madison as its chief patrons and supporters. And it continued to be sanctioned by the practice of the Government from that day down to 1824; during all which time it had met with little, or no, serious opposition, except from Mr. Webster himself, who, in 1824, opened the tremendous battery of his logic and eloquence against the whole system, root and branch. Now, here the question arises, how did it happen that this was an original question with Mr. Webster in 1824, and not in 1828? How did it happen, that the practice and the policy of the Government from its very origin, had not weight with ‘the great expounder’ in 1824; and yet had become absolutely decisive in 1828? Was there any peculiar virtue in these last four years of the Republic, that they should have wrought so wonderful a change in his position and policy? It is certain that, in 1824, he could, with irresistible logic and eloquence, arraign the whole policy of Government at the bar of reason, and condemn it as inconsistent with the Constitution, with justice, and with the principles of political economy; and yet, only four years later, he could pretend that, as a true and loyal citizen, it was his duty to submit his own judgment, as well as

the opinion of all the great statesmen, jurists, and political economists, whom he had quoted in 1824, to the unscrupulous practice of the one-sided Government of the United States for four years? The real source of this sudden submission, the true cause of this new-born loyalty, is no secret, no mystery. It is, on the contrary, as open and plain as the noon-day sun. During the four years from 1824 to 1828, the constituents of Mr. Webster had spoken out; and, in no equivocal tones, pronounced in favor of the protective policy. Hence that policy was no longer an open question: it was settled by the constituents of Mr. Webster as by the voice of God; and henceforth 'the great expounder' is found in the ranks of the most extreme protectionists. He no longer has one word for the Constitution, or for justice, or for free-trade; and all the jurists, philosophers, statesmen, and political economists, whom, in 1824, he had summoned as witnesses against the protective policy, disappear forever from his speeches in the Senate of the United States. Henceforth, on these grand themes, 'the God-like Daniel' is dumb.

We should fail to do justice to Mr. Webster, especially to his power of self-deception, if we neglected to notice another plausible pretext for this sudden change in his course respecting the system of American tariffs. New England, said he, had opposed the protective policy as unequal, unjust, and unconstitutional; but this policy was, in spite of her opposition, fastened on the country. Hence, finding her commercial interests crippled by this policy, she turned her attention to manufactures. Having invested much of her capital in these, she had acquired rights and interests under the actual policy of the General Government, which could not be impaired, by a reversal of that policy, without great wrong and bad faith in the rulers of the country. There is, no doubt, at the bottom of this plea, a sound and just principle. But yet this principle, however sound and just, fails to meet the exigency of Mr. Webster's case. Though, as a general principle, it is good, its application is bad. It utterly fails to vindicate the particular conduct and character of Mr. Webster, or to answer the purpose for which it is adduced.



For, admitting this principle to the fullest extent to which it can be fairly carried, Mr. Webster is still condemned out of his own mouth. Other governments, as well as that of the United States, had adopted the policy of protective tariffs. This policy, said Mr. Webster in 1824, was not properly called 'the American system;' because it had long since been adopted by all the governments of the Old World. It had been adopted by them, said he, before the science of political economy had been created; and, to the great injury of the best interests of nations, it still continued to trammel the commerce of the world. Now, under such circumstances, what course should statesmen pursue, or recommend? Mr. Webster himself has answered this question; and his answer is far above and beyond the power of human contradiction. Though the policy was mistaken, said he, it was necessary to respect the rights and interests which had accrued under it. Hence, it was right and proper to shun all sudden or violent changes, and undo the existing system by slow degrees, in order that capital might safely, or without destruction, find its way into other and more beneficent channels, and the wings of commerce be gradually unfettered, and her free blessings scattered to the ends of the earth. This, said he in 1824, is precisely the course pursued by all the wise statesmen of Great Britain; and their views and opinions to this effect are quoted by him. They deplored the introduction and existence of that mistaken policy, regarding it as the work of past darkness; and, while they respected all vested rights and interests, they still labored to emancipate trade, and restore the freedom of commerce. In one word, they aimed to undo, as fast as it was right and practicable, what had been so unwisely done in times past.

Now did Mr. Webster pursue this course in 1828? Did he imitate the wisdom he had so greatly admired, and so eloquently extolled? Did he deplore the protective policy as an existing fact, and call upon his contemporaries to assist him, as wise and cautious legislators, to undo the mischief they had done? No, indeed; far, very far, from it. On the contrary, he supported the still higher tariff, the still more restrictive policy, of 1828. He was for plunging the country still deeper

into that odious and oppressive policy. He was for putting new fetters on the freedom of commerce; for imposing new weights upon her already too heavily laden wings. As an original question, said he, the protective policy is unconstitutional; but then, since we have tasted its sweets, we must, and we will, have a little more of this unconstitutional thing. All our gains under this system were, originally, unjust and unconstitutional; but then, since the system has been introduced, we must, and we will, have a little more of these unholy gains. His constituents, in fact, had, like the horse-leech, cried, Give! Give! and the 'God-like Daniel,' prudently shunning the lion's den, echoed, Give! Give!

The above plausible pretexts, put forth by Mr. Webster in defence of his consistency, satisfied the Whigs and the protectionists of his day, by whom he was joyfully hailed as a powerful ally. But they do not appear to have fully satisfied Mr. Webster himself. For, as if he had a secret misgiving, he began to look around in quest of arguments to prove the constitutionality of protective tariffs. He could not, like a statesman of the Old World, pursue the course recommended by expediency; for there stood the Constitution, which, as an American Senator, he was sworn to support. No one ever pretended that the tariffs of the Old World were unconstitutional; but Mr. Webster himself had maintained, with all the powers of his eloquence, that the protective policy was at war with the Constitution of his country. Hence, in his new position, it would be a relief to his mind and conscience to discover that, after all, the protective policy is really sanctioned by the Constitution. Accordingly, instead of seeking to undo the unjust policy of Congress, he sought to undo his convictions respecting that policy. Fortunately for his purpose, Mr. Madison, 'the father of the Constitution,' appeared, about this time, in defence of the constitutionality of the protective policy. The arguments of Mr. Madison, as we learn from Mr. Webster's own confession, produced a deep and powerful impression on his very docile and susceptible mind; and went a great way toward convincing him that the policy of protection is, after all, really sanctioned by the Constitution.



He was certainly not 'convinced against his will.' Let us, then, examine these arguments of Mr. Madison. From his great knowledge of the subject, as well as from his great skill as a dialectician, we may conclude, that they are the most plausible and powerful arguments of which his side of the question admits.

As we have already seen, neither Madison nor Hamilton seems to have considered the question of the constitutionality of the protective policy, when, in 1791, they recommended it to the Congress of the United States. Madison committed himself to this policy in 1791; but it was not till 1828 that he gave his reasons for believing it to be constitutional. These reasons, unless we are greatly mistaken, are, like the pretexts of Mr. Webster, merely the coverings of a foregone conclusion, and not the real motives by which his course was determined, or his opinion formed. They are the after-thoughts, by which he aims to justify his course, rather than the fore-thoughts by which that course was guided. Let us see if this is not so.

'The Eastern States,' says Mr. Madison, 'expected, at the time the Constitution was formed, that the policy of protective tariffs would be adopted by the General Government.' This, as a question of fact, may be very true: and certainly no one was better qualified to judge of such a question than Mr. Madison; for he helped to frame the Constitution, and was, both in and out of Congress, well acquainted with all the leading men at the time this policy was adopted. But what has this fact to do with the question of constitutional right and law? There is the Constitution, the written compact between the parties; and the question relates to the import and meaning of that instrument. What does it signify, then, to tell us what one of the parties to that compact expected? Is it not to be interpreted, according to the sense of its own terms, and in the light of its own history, rather than in conformity with the expectations, or wishes, of one of the parties? It is not even pretended, that the other party, the Southern States, either expected or dreamed of any such policy. On the contrary, it is well known that they were hostile to that policy. It is difficult to conceive by what sort of logic it is that the

expectations and wishes of one of the parties to a contract are considered in its interpretation, while those of the other party are wholly disregarded. The Eastern States may have expected, and no doubt did expect, this policy to be pursued by the General Government; but how many unconstitutional expectations, or designs, have been cherished by all parties, and by all portions, of the United States? Such an expectation, however widely diffused or warmly entertained, may be a reason why a politician, and especially why an aspirant for the Presidency, should favor and adopt the policy expected; but it is no reason for deeming such policy constitutional. Should not such an argument be addressed to selfish and self-seeking politicians, rather than to the inquirer after truth? It has, indeed, been the very bane, and curse, and ruin, of the great Republic of the New World, that her guides and teachers have paid more respect to the expectations of the people, or of this or that portion of the people, than to the Constitution they had sworn to support, or to the eternal principles of justice they were bound to maintain. Behold! 'the father of the Constitution' itself, gathers its meaning from the expectation of one of the parties to the compact!

Mr. Madison draws an argument in favor of the constitutionality of the protective policy from the action of some of the framers of the Constitution. As some of those, said he, who made the Constitution, were in Congress, and voted for a protective tariff, so we should regard it as constitutional. It is not to be supposed that they would have favored an unconstitutional measure. Now all such arguments would be unnecessary, if the power to protect manufactures could only be found in the Constitution. Mr. Madison was perfectly aware that unless this power could be found in the Constitution, it absolutely had no existence for the General Government. Why, then, did he not look into the Constitution, and show us where this power is to be found? Why stand at a distance, and infer that such a power must exist somewhere in the Constitution, because some of the framers of the Constitution exercised that power? If they had any right or authority to exercise such a power, it was only because they had first discovered its



existence in the Constitution; and if they found it there, they can surely tell us where they found it? Otherwise we must doubt its existence in that instrument. If the fathers of the Constitution, with Hamilton and Madison at their head, chose to decide this most important question without considering the Constitution, then we may decide the question of the constitutionality of protective tariffs without considering their authority. Indeed, if they did not trouble themselves to form an opinion respecting the constitutional question, then their action, based on views of expediency alone, has no bearing on the question.

Again, says Mr. Madison, if the Federal Government did not have the constitutional power to protect manufactures, then there would be no Government for this purpose; a thing unknown among all the nations of the Old World. There are, in fact, a great many things in the Government of the United States which are wholly unknown to all the governments of the Old World; so that, as Mr. Madison himself declares, 'it is without a parallel on the face of the globe.' One of these things is, that it has a written Constitution, and can exercise no power whatever unless it be found in that Constitution. Hence, to reason from the governments of the Old World, which possess unlimited powers, to the Government of the United States, which is one of very limited and defined powers, is a gross fallacy. It evades the only real question, which is, Where, in the Constitution of the United States, is the power to protect manufactures? *That* is the charter of all its rights and powers; and if the power in question exists at all, it exists in the Constitution; and it must be found there by a fair interpretation of its terms, without flying to the unlimited governments of the Old World in quest of error and delusion. Since the fathers of the Constitution were pleased to frame a compact for the Government of the United States, and reduce all its articles to writing, we insist that, in their legislation, they should regard its terms and provisions, and not follow those governments which, in the formation of their own, they had so carefully shunned and so decidedly condemned.

After all, however, Mr. Madison does attempt to find the

power in the Constitution of the United States. He ventures to seek it, where alone it can possibly exist, and where alone it should be sought by every honest supporter of the Constitution. But what does he find? Not one word expressly in favor of this power. No such discovery is even pretended. In all the debates of the Convention of 1787, absolutely nothing is said about such a power in the Government of the United States. The power to protect manufactures, is mentioned neither in the Constitution, nor in the debates of the Convention by which that compact was framed. Nor is this all. In the *Federalist*, in which the powers of the new Government are so extensively and so elaborately discussed, even down to the most minute particulars, no allusion whatever, not even the most distant, is made to this tremendous power. Among all the advantages of the new Government, as set forth in the pages of the *Federalist*, the power to protect manufactures is not even noticed. Now is not all this silence truly marvellous, if the framers of the Constitution really intended to confer such a power on the Government of the United States, and, at the same time, to permit all the parties to the compact to see that it had been conferred?

In the Constitution of the United States, Mr. Madison finds the power to regulate commerce; and from this he infers the power to protect manufactures. Now is it at all likely that, if the framers had meant to confer so great and important a power on the new Government, they would have left it to uncertain inference only, without one word of comment or explanation? If this power, indeed, exists in the Constitution of the United States, is it not evident that it was conferred by accident, and not by design?

The power to regulate commerce, says Mr. Madison, implies the power to protect manufactures, and should be so construed, because it was so understood by the British Government at the time our Constitution was formed. The truth is, that the Government of Great Britain had not, like that of the United States, anything to do with expressly granted and implied powers. As it was a government of unlimited powers, so it was not under the necessity of inferring one power from



another. It exercised the power to protect manufactures, precisely as it exercised the power to regulate commerce; because, free from the limitations of a written Constitution or compact, it originally and in itself possessed both powers. The assertion, that the British Government inferred the one of these powers from the other, or proceeded on the supposition that the one is implied in the other, seems to be about as pure a fiction as was ever invented for the purpose of argument or delusion. It has no foundation whatever in truth, or in the nature of things. The British statesman had, in fact, only one question to consider, and that is, whether it was right, and proper, or expedient, to protect manufactures. The question, whether this power was implied in the power to regulate commerce, he was never called upon to consider or decide; and, accordingly, such a question never entered into his imagination. It is purely of American origin, and arose in consequence of the very peculiar nature of the Constitution of the United States.

According to that Constitution, the Federal Government possesses two classes of powers, namely: those which are expressly granted, and those which are 'necessary and proper for carrying into execution' the expressly granted powers.<sup>12</sup> This will not be denied. It is, in fact, the universally received theory and interpretation of the Constitution. Now, as we have seen, the power to protect manufactures is not found in the first class of powers, or among those expressly granted. Hence, if it exist at all, it must be 'necessary and proper to carry into execution' some one or more of those powers. Is it necessary and proper, then, to carry into execution the power to regulate commerce? This is the constitutional question, as presented by the Constitution itself; and Mr. Madison either means to decide this question, or he means nothing to the purpose.

The power to regulate commerce is one thing; and the power to protect manufactures quite another. In the Constitution, the authority to lay duties on imports was, as is perfectly well known, given to enable Congress to regulate commerce. The power to protect manufactures is not expressly given at all,

<sup>12</sup> Constitution of the United States, Art. I. Sec. 8.

much less for any such purpose. Nor is it, James Madison himself being the judge, a necessary or proper means for the attainment of such an end. In the ratifying Convention of Virginia, he insisted, with perfect justice, that if the revenues of the General Government should be raised by tariffs alone, this would 'discourage commerce,' as well as produce 'many political evils.'<sup>13</sup> He then and there most truly argued, as Hamilton had done in the *Federalist*, that the imposition of such duties, even for the purpose of revenue, would be oppressive to the Southern States, *as well as injurious to commerce*.<sup>14</sup> How grievously, then, must commerce have been burdened, and the Southern States oppressed, by the tariff of 1828, which was raised far above the revenue standard with the avowed design of protecting and building up the manufactures of the North? And how, in the name of common sense, can that be a necessary, or proper, means of regulating commerce, which only lays it under heavy burdens and discouragements, as well as weakens and oppresses one section of the Union?

Nor is this all. The power 'to regulate commerce with foreign nations, and among the several States,' is contained in precisely the same grant, in precisely the same clause of the Constitution. The object for which this last power, that is, the power to regulate commerce 'among the several States,' was given, is well explained by Mr. Madison himself in the pages of the *Federalist*. In the forty-second number of that work, he says: 'A very natural object of this power was the relief of the States which import and export through other States, from the improper contributions levied on them by the latter. Were these at liberty to regulate the trade between State and State, it must be foreseen, that ways would be found out, to load the articles of import and export, during the passage through their jurisdiction, with duties which fall on the makers of the latter, and the consumers of the former. We may be assured, by past experience, that such a practice would be introduced by future contrivances; and both by that, and by a common knowledge of human affairs, that it would nourish increasing animosities, and not improbably terminate in serious

<sup>13</sup> Elliot's Debates, Vol. III. p. 248.

<sup>14</sup> Ibid.



interruptions of the public tranquility.' Now here Mr. Madison expressly and most truly tells us, that the power to regulate commerce between the States, was designed, by the framers of the Constitution, to protect one class of States from preying upon another, or from having an undue advantage over them. Yet, in the face of all this, he so construes the power to regulate foreign commerce, as to defeat the object of the power to regulate the domestic commerce of the country. That is to say, 'the father of the Constitution,' as he is called, so construes one part of that instrument, as to annihilate the object for which the adjacent part was enacted; and to justify a scheme by which the Southern States would, as he himself had contended, be injured and oppressed for the benefit of the Northern States!

The motives from which this unjust and oppressive system actually sprang, are well explained by Mr. Madison in the same number of the *Federalist*. In the sentence which immediately follows the above extract, he says: 'To those who do not view the question through the medium of passion or of interest, the desire of the commercial States to collect, in any form, an indirect revenue from their uncommercial neighbors, must appear not less impolitic than it is unfair.' Ay, the desire of the commercial States, or of the manufacturing States, or of any other States, to fleece their neighbors by a system of legislative robbery, was both unfair and impolitic in the extreme. And Mr. Madison, as the calm legislator, and before he came to 'view the question through the medium of passion or interest,' could perfectly well see the nature of such a system, and condemn it, as he did in the Virginia Convention of 1788. 'But,' says he, in the next sentence, 'the mild voice of reason, pleading the cause of an enlarged and permanent interest, is but too often drowned before public bodies as well as individuals, by the clamors of an impatient avidity for immediate and immoderate gains.' It was precisely thus, and not otherwise, that the protective tariffs of the one-sided Union were introduced, and grew to such an insufferable height of insolent injustice. 'The desire of the commercial States to collect, in any form,' which the wit or ingenuity of man could devise, as

much money as possible from the pockets of their neighbors, was not extinguished by the formation of the new and 'more perfect Union.' On the contrary, it conceived and brought forth that system of high protective tariffs, by which the South was so fearfully oppressed, and the 'immediate and immoderate gain' of the North was so prodigiously accumulated. Loud, clamorous, and passionate in their praises of the Union, by which they were enriched at the expense of their neighbors, the people of the North, misled and deceived by their guides, trampled, with imperial scorn, on the Constitution of the United States, the only bond of the Union, and the very life of its life. The express terms of the Constitution, which required all taxes to be 'uniform throughout the United States,' were utterly despised; and this great burden of Government was made to press as unequally as possible upon different sections of the Union, not only to raise its revenues, but also to protect and build up the manufactures of the North; a degree of shameless injustice which, as we have seen, Hamilton deemed too great and too glaring for even 'the amazing violence of the Democratic spirit.' Yet James Madison, the father of the Constitution, lived to see, but not to rebuke, this high-handed iniquity. He had, it is true, condemned it in advance; but then, it was not an actual power in the State, or anything for timid and cowardly minds to dread. It had, however, no sooner assumed its gigantic proportions, than he cowered beneath its tremendous influence. Never a man of deep and earnest convictions, and seldom, if ever, to be found on the unpopular side of any question, he was carried away by the whirlpool of political passions, siding with the pretended friends of the Union and the real enemies of the Constitution. The mild voice of his own reason, as uttered in the *Federalist* and in the Convention of 1788, is overborne and drowned by the clamors of the interested passions of other men, and he begins to weave sophisms to justify the measures he had formerly condemned; leaving John C. Calhoun, unaided and alone, to bear the reproach of treason for a moment, and to win forever a glorious renown as the fearless champion of despised justice.

If the power to protect manufactures be constitutional only



as a necessary and proper means to regulate commerce, then, most assuredly, it should have been used for that purpose, and not for purposes as hostile to the best interests of commerce as it was to those of one section of the Union. Then, most assuredly, it should have been exercised to regulate commerce, and not merely, as it was in reality and avowedly, to protect manufactures, without the least reference to, or thought of, such regulation. The power, it is said, was constitutional as a means; and yet it was not used as a means at all, but as an independent power, having no relation whatever to commerce, except, in the pursuit of another object, to load it with burdens and 'discouragements.'

In conclusion, Mr. Madison argues the constitutionality of protective tariffs, from the fact, that 'nothing was said against the existence of that power in any of the Southern conventions.' True. But if nothing was said against the existence of this power by members of the Southern conventions, it was just because none of them imagined it to have an existence. Much was said in those conventions against the power of Congress to raise the revenue by tariffs; because this would enrich and strengthen the North at the expense of the South. This objection was, as we have seen, repeatedly and eloquently urged against the new Constitution. Now if in addition to this, any one had imagined or suggested, that still higher tariffs would be laid to protect the manufacturing interests of the North, Patrick Henry, and other friends of the South, would have shaken those assemblies with the thunders of their eloquence against the enormity of such undreamed-of injustice. They did not denounce such a power, however, or object to the Constitution on account of its existence, for the same reason that they were silent respecting the power of Congress to create an hereditary monarch, or a House of Lords. Futile as were the imaginations of the opponents of the new system, such an objection never occurred to them, or it would have been a most formidable weapon in their hands. The silence of the Southern conventions on this subject argues, not the existence, but the non-existence, of the power in question.

Though no one spoke against the existence of such a power,

many contended that Congress would, under the new Constitution, have no right to exercise the far less obnoxious power to establish a purely revenue tariff, or to raise the greater part of the taxes by duties on imports. Mr. Madison himself was foremost, and most effective, among these champions of free-trade in the ratifying Convention of Virginia. In reply to those who objected against the power of direct taxation, he said: 'They will be continually necessitated to augment imposts. If we throw a disproportion of the burdens on that side, *shall we not discourage commerce*, and suffer many political evils? Shall we not increase that disproportion of the Southern States, which, for some time, will operate against us? The Southern States, from having fewer manufactures, will import and consume more. They will, therefore, pay more of the imposts. The more *commerce is burdened*, the more the disproportion will operate against them. If direct taxation be mixed with other taxes, it will be in the power of the General Government to lessen that inequality. But this inequality will be increased to the utmost extent, if the General Government have not this power.'<sup>15</sup>

The General Government had the power of direct taxation; but it did not use that power for the purpose for which, according to Hamilton and Madison, it was given, namely, to prevent the inequality produced by a revenue tariff. On the contrary, the General Government, in the hands of a Northern majority, raised its revenue by the mode of indirect taxation alone, by duties on imports. Although such a tariff was deemed, by Hamilton and Madison, in 1788, too high, too unequal in its operation, and too oppressive to the South, it was always tolerated by Calhoun. But Northern cupidity, not satisfied with the unjust gains of such a measure, plumed its wing for a still higher flight, and sharpened its beak for still richer prey. Accordingly, we find it perched, in rapid succession, on the high and continually ascending protective tariffs of 1816, 1820, 1824, and 1828.

The 'many political evils' contemplated and condemned by Mr. Madison in 1788, were finally and most fearfully consum-

<sup>15</sup> Elliot's Debates, Vol. III. p. 248.



mated, with other evils of which he did not then dream. 'Commerce was burdened' to an extent not dreamed of by him; 'the disproportion of the Southern States' was increased, and the balance of power between the two sections was overthrown; the South groaned beneath the greatness of its burdens, and the North rejoiced in the greatness of its benefits. The causes mentioned by Mr. Madison were set in motion; the effects took place precisely as predicted by himself, only in greatly exaggerated form; and yet, in spite of all this, he sat down to spin sophisms in justification of the very iniquity he had so truly described, and so eloquently condemned! And Daniel Webster was caught, or pretended to be caught, in the cobwebs of his sophistry! We dismiss the subject, and the two great sophists.

The tax of three pence per pound on tea was the occasion, rather than the cause, of the Revolution of 1776. The restrictions and burdens, which the legislation of Great Britain had imposed on the commerce of her American Colonies, was the great cause of that Revolution. In the words of Edmund Burke, 'These colonies were evidently founded in subservience to the commerce of Great Britain. From this principle, the whole system of our laws concerning them became a system of restriction. A double monopoly was established on the part of the parent country: 1. A monopoly of their whole import, which is to be altogether from Great Britain. 2. A monopoly of all their export, which is nowhere but to Great Britain, as far as can serve any purpose here. On the same idea, it was contrived that they should send all their products to us raw, and in their first state, and that they should take everything from us in the last stage of manufacture. Were ever a people under such circumstances, that is, a people who were to export raw, and to receive manufactured, and this, not a few luxurious articles, but all articles, even those of the grossest, most vulgar, and necessary consumption—a people who were in the hands of a general monopolist—were ever such a people suspected of a possibility of becoming a just object of revenue?' Thus, this double and grinding monopoly of the commerce of the Colonies filled the cup of British oppression, which was caused to overflow by the tax of three pence upon tea. The principle of this

tax would, it is true, as alleged by Mr. Burke, enable the Government of Great Britain 'to rob a people of their whole property;' but still the actual tax was not so much the cause of 'the rebellion' against the mother country, as the great and grievous burdens to which it had been superadded. Such was the view of Edmund Burke, who adds, 'The American merchants are our factors, all in reality, most even in name. . . . We have all, except the *peculium*, without which, even slaves will not labor.'<sup>16</sup>

Precisely the same view of the causes of the Revolution of 1776, is taken by the greatest of American as well as by the greatest of British statesmen, that is, by Alexander Hamilton, as well as by Edmund Burke. 'Our British masters,' said Hamilton, in relation to the burdens imposed on the commerce of the Colonies, had shown that 'the power of legislating for us, and raising a revenue from the articles of our commerce, *would be a sufficient degree of slavery*,' without 'the power of taxing us against our consent.'<sup>17</sup> The same view was entertained by Mr. Webster, and expressed in a speech delivered in 1820, before he became the champion of high protective tariffs, and of restrictions on commerce in favor of New England. 'It was easy to foresee,' said Mr. Webster, '*what we also know to have happened*, that the first great cause of collision and jealousy would be, under the notion of political economy then and still prevalent in Europe, an attempt on the part of the mother country to monopolise the trade of the colonies. Whoever has looked deeply into the causes which produced our Revolution, has found, if I mistake not, the original principle far back, in this claim, on the part of England, to monopolise our trade, and a continued effort on the part of the colonies, to resist or evade that monopoly.'<sup>18</sup> Thus, according to Burke, Hamilton, and Webster, the desire of the Colonies to throw off the burden of this double monopoly on their commerce, *and to obtain the advantages of free-trade*, was the true cause of the Revolution.

<sup>16</sup> Burke's Works. American Taxation. Vol. I. p. 463.

<sup>17</sup> Hamilton's Works. Vol. II. p. 86.

<sup>18</sup> Webster's Works. First Settlement of New England. Vol. I. p. 24.



No one who has read their writings can fail to discover that the authors of the Revolution of 1776, and the framers of the Constitution of 1787, were actuated by the design to establish a free-trade government. This was, in fact, the grand object of their labors. The leading men of all sections and of all parties, even those most opposed in other respects, were then, while the country suffered under the evils of the opposite system, in favor of the doctrine of free-trade. If all men were as they ought to be, then the system of free-trade, as developed by Quesnay, by Turgot, and especially by Adam Smith, would be most perfectly adapted to the condition of the world. But, unfortunately, the selfishness and rapacity of nations impose certain limitations on the beautiful theory of a perfectly free commerce. Hamilton, in his celebrated Report of 1791, insists that if all nations would reduce that theory to practice, it would prove an incalculable blessing to the world. It would, indeed, be the most magnificent reform ever seen or conceived by man, in the sphere of international politics. But Hamilton was far too profound a statesman, and far too practical in his wisdom, not to perceive that it would be ruin to any one country to adopt the doctrine of free-trade, while others continued to wage a legislative war of imposts and restrictions against her commerce. Jefferson entertained precisely the same views; agreeing on this, if on no other subject, with his great rival, Alexander Hamilton. Both wished to see the Federal Government so wielded, in conformity with its original design, as to liberate, as far as possible, the commerce of the nations with whom their country might have intercourse.

‘The system,’ says Mr. Jefferson, ‘into which the United States wished to go, was that of freeing commerce from every shackle.’<sup>19</sup> Again, he says, ‘Our people have a decided taste for navigation and commerce. They take this from their mother country; and their servants are bound to calculate all their measures on this datum: *We wish to do it by throwing open all the doors of commerce, and knocking off all its shackles.*’<sup>20</sup> In like manner, Alexander Hamilton, in the *Federalist*, recommends the new Constitution to the favor of the people, because it would enable the General Government

<sup>19</sup> Jefferson's Correspondence. Vol. I. p. 355.

<sup>20</sup> *Ibid.*, p. 344.

to emancipate commerce, and establish free-trade. 'By prohibitory regulations,' says he, 'extending at the same time throughout the States, we may oblige foreign countries to bid against each other, for the privileges of our market. This assertion will not appear chimerical to those who are able to appreciate the importance, to any manufacturing nation, of the markets of three millions of people, increasing in rapid progression, for the most part exclusively addicted to agriculture, and likely from local circumstances to remain in this disposition; and the immense difference there would be to the trade and navigation of such a nation, between a direct communication in its own ships, and an indirect conveyance of its products and returns, to and from America, in the ships of another country. Suppose, for instance, we had a government in America, capable of excluding Great Britain (with whom we have at present no treaty of commerce) from all our ports; what would be the probable operation of this step upon her politics? Would it not enable us to negotiate, with the fairest prospects of success, for commercial privileges of the most valuable and extensive kind, in the dominions of that kingdom?' <sup>21</sup> Thus, while the Constitution was pending before the people, they were told, by its great expounder and advocate, that the power to regulate commerce should and would be employed to emancipate trade; by inducing the manufacturing nations of the Old World, and especially Great Britain, to lay aside their restrictive policy. In like manner, George Washington, the president of the Convention of 1787, in a letter to Lafayette, said: 'I notice with pleasure the additional immunities and facilities in trade, which France has granted to the United States by the late royal arrêt. I flatter myself, it will have the desired effect in some measure of augmenting their commercial intercourse. From the productions and wants of the two countries, their trade with each other is certainly capable of great amelioration. Whenever we shall have an efficient general government established, that government will surely impose retaliating restrictions upon the trade of Great Britain.' The leading men, indeed, of all sections and

<sup>21</sup> Federalist. No. XI.



all parties expected, with Washington, that the energies of the new Government would be directed to the grand object of the emancipation of commerce, and the promotion of free-trade. Yet the very power given for this purpose, namely, the power to regulate commerce, was afterward construed to imply a power to lay, not with a view to its ultimate emancipation, but simply to protect manufactures, additional burdens on trade, or to augment the very evils it was designed to correct! Or, in other words, the expressly granted power was understood to imply a power to defeat the very purpose for which it was granted! Such is the futility of written constitutions; and such the faith with which they are observed! They are, with equal ease, made to support or to defeat the object for which they were instituted, according to the exigencies of party, or the ruling passion of the hour! If, in the art of government, anything could be more vain than such constitutions, it remains to be invented.

Everybody has heard of the saying that 'Cotton is King,' and most persons have ridiculed it as a too boastful estimate of the power and influence of the great staple of the 'Confederate States.' Very few are, however, aware of the fact, that these words form the title of a book, which was written by a Northern professor of political economy, who had never resided in the South, and who was hostile to the institution of slavery. Having studied, as a political economist, the sources of wealth in America, he did not fail to perceive how greatly the prosperity of the North was due to the negro labor of the South. But, as a general thing, the North entertained very different notions as to the sources of her greatness, prosperity, and glory. Such was the blindness of her unreasoning self-idolatry, that she imagined the South only existed by her sufferance, and that if the connexion were severed the South would speedily sink into utter and remediless ruin. While, in the estimation of all who had studied the subject, she was growing rich on the products of slave-labor, she attributed the fearful decline of the South, not to her own legislation, but to the hated institution of slavery; making that the scape-goat of her abominable sins. The fact was notorious, and freely

admitted by all of her representatives and statesmen in the great Federal Convention of 1787, that the South, at the time the new Union was formed, was by far the most wealthy and prosperous section of the United States. But he must have paid little attention indeed to the history of America, who can imagine that facts, however undeniable, have had anything to do with the formation of the views and opinions of her vast masses or multitudes. They feed on fiction. They suck in delusion and lies as a whirlpool sucks in water. One fiction light as air, if it only falls in with and gratifies the national vanity, has more weight with the great nation than a thousand solid facts, which may not be made to serve so pleasant a purpose. How, then, could they be expected to heed the undenied and undeniable fact, that the Southern States, with slavery, were far richer than the Northern States, up to the very moment 'the more perfect,' or rather the more fatal, Union was formed between them, and that from that time they began to decline in all the elements of material prosperity and wealth? Or how could they be expected to ascribe this reverse in the fortunes of the South to their own rapacity and legislative robbery, rather than to the institution of slavery? Yet, would they exclaim, 'there is no disputing about facts. Only look at Pennsylvania and Virginia; see how the one has prospered and how the other has decayed; and behold in this spectacle the effects of slavery! Slavery, slavery, slavery, has done all the mischief.' Thus slavery was made to cover all the sins of Northern legislation. But why did they not look at Pennsylvania and Virginia before 'the more perfect Union' was formed? Why did they not consider the fact, that previous to that event, which proved so fatal to the grand 'Old Dominion,' the pride and the glory of the New World, she was far more prosperous than Pennsylvania, or than any other Northern State? Because, no doubt, that fact was not quite so agreeable to their imaginations, nor quite so easy of explanation; standing out, as it did, in direct conflict with their theory.

Many thinking men at the North, however, entertained the same views on this subject as those put forth by the statesmen of the South. Not only the author of 'Cotton is King,' but



other political economists of the North, endeavored to open the eyes of that section to the indispensable necessity of keeping the South in the Union, by the practice of justice and the observance of the Constitution. Thus, having exhibited a number of statistical tables to show the decided superiority of the Southern States, one of the most distinguished political economists ever produced by the North, concludes in these words: 'But I am sick of this investigation. I sicken for the honor of the human species. What idea must the world form of the arrogance of the pretensions of the one side, and of the folly and weakness of the rest of the Union, to have suffered them so long to pass without exposure and detection. The naked fact is, that the demagogues in the Eastern States, (as the North was then called,) not satisfied with deriving all the benefit from the Southern section of the Union that they would from so many wealthy colonies—with making princely fortunes with the carriage and exportation of its bulky and valuable productions, and supplying it with their own manufactures, and the productions of Europe and the East and West Indies, to an enormous amount, and at an immense profit, have uniformly treated it with outrage, insult, and injury. And, regardless of their vital interests, the Eastern States were lately courting their own destruction, by allowing a few restless, turbulent men to lead them blindfolded to a separation which was pregnant with their certain ruin. Whenever that event takes place, they sink into insignificance. If a separation were desirable to any part of the Union, it would be to the Middle and Southern States, particularly the latter, who have been so long harassed with the complaints, the restlessness, the turbulence, and the ingratitude of the Eastern States, that their patience has been tried almost beyond endurance. "Jeshurun waxed fat and kicked," and he will be severely punished for his kicking, in the event of a dissolution of the Union.'<sup>22</sup>

Again, another political economist, a native of the North and a citizen of New York, said, in 1860, the year of Mr. Lincoln's election: 'That large sum, (eleven hundred millions of dollars,) has been taken from agricultural industry and added

<sup>22</sup> Olive Branch, sixth edition, p. 278.

to manufacturing industry. The fisheries of the Eastern States, (in addition to the above sum resulting from tariffs alone,) drew \$5,000,000 as bounties paid to those engaged in them, out of the federal treasury, to the date of the abolition of those bounties. The North enjoyed a monopoly of the carrying trade, foreign vessels being excluded. These, and other circumstances, drew the surplus capital from the agriculturist into the coffers of the manufacturer. The accumulation of capital thus brought about, became invested in stocks, banks, insurance companies, all of which drew large profits on credits granted to the other sections. The North has \$600,000,000 so invested, of which \$356,318,000 are in banks alone, which draws \$60,000,000 per annum from the earnings of the other sections. The frequent pilgrimages from all sections to the Eastern cities for the purchase of goods, and in pursuit of pleasure, form a large item of cost charged upon goods, that is paid by the consumer. The profits of other business may be approximated as follows:

|  |               |
|--|---------------|
| Bounties to fisheries, per annum.....                    | \$ 1,500,000  |
| Customs, per annum, disbursed at the North.....          | 40,000,000    |
| Profits of Manufacturers.....                            | 30,000,000    |
| “ Importers.....   | 16,000,000    |
| “ Shipping, imports and exports.....                     | 40,000,000    |
| “ on Travellers.....                                     | 60,000,000    |
| “ of Teachers, and others, at the South, sent North..... | 5,000,000     |
| “ Agents, brokers, commissions, &c.....                  | 10,000,000    |
| “ Capital drawn from the South.....                      | 30,000,000    |
| <hr/>  |               |
| Total from these sources.....                            | \$231,500,000 |

This is an approximation of the annual load which Southern industry is required to carry, and the means of paying it depends upon black labor. The heavy drain of capital thus created prevents an accumulation at the South, and promotes it as effectively at the North, where every such accumulation only accelerates the drain. If we take the aggregate of these items for ten years only, the result is the enormous sum of \$2,315,000,000, and allowing 20 per cent. of the sum only as the aggregate of the fifty years previous, the amount is 2770 millions of dollars earned at the South, and added to Northern accumulation. The fishing bounties alone, as we have seen,



reach \$12,944,000, mostly paid to Maine and Massachusetts. It is not, therefore, a matter of surprise if we find the North very rich, and the South showing much slower accumulation. No matter how great may be the production of wealth at the South it pours off into Northern coffers as rapidly as it is created, and, singularly enough, the recipients of that wealth are continually upbraiding the South with its creation.’<sup>23</sup>

In like manner, the celebrated Senator from the great West, Mr. Benton, who was neither a Northern nor a Southern man, took the same view as the above writers on political economy, or the sources of wealth, with respect to the legislative robbery of the smaller by the larger section of the Union. ‘A universal pressure for money,’ says Mr. Benton, describing the effects of the tariff on the South, ‘not enough for current expenses—the price of all property down—the country drooping and languishing—towns and cities decaying—and the frugal habits of the people pushed to the extreme of self-denial, for the preservation of their family estates. . . . It is federal legislation which has worked this ruin. Under this legislation the exports of the South have been made the basis of federal revenue. The amount annually levied upon imported goods to defray the expenses of the Government, are deducted out of the price of their cotton, rice, tobacco, either in the diminished price which they receive for these staples in foreign markets, or in the increased price which they pay for the articles which they consume at home. Virginia, the Carolinas, and Georgia, may be said to defray three-fourths of the annual expense of supporting the Federal Government; and of this great sum annually furnished by them, nothing, or next to nothing, is returned to them in the shape of Government expenditure. That expenditure flows in an opposite direction—it flows northwardly in one uniform, uninterrupted, and perennial stream. This is the reason why wealth disappears in the South and rises up in the North. Federal legislation does all this. It does it by the simple process of eternally taking away from the South, and returning nothing to it.’<sup>24</sup>

<sup>23</sup> Southern Wealth and Northern Profits, p. 127.

<sup>24</sup> Speech in the Senate of the United States, in 1828.

Now if the political economists of the North, and the great Senator from the West, could thus describe the decay of the South under the withering influence of federal legislation, what must have been the feelings of her own great statesmen in view of such a system of legalized plunder and robbery? It would be easy to produce from the speeches of her Haynes, of her Calhouns, or of her Davises, the most eloquent and pathetic appeals to the good sense and the good feeling of the North against the cruel injustice of such one-sided legislation. The event has shown, however, that they might just as well have appealed to the Plymouth rock itself as to the heart of the Northern majority. For that majority, more than any other ever known in the history of the United States, has exemplified the terrible words of De Tocqueville; heeding, in its onward, heartless, and despotic course, neither the outcries nor 'the complaints of those whom it crushes upon its path.' Every great, enlightened, and disinterested heart at the South was, indeed, crushed between its devotion to the Union and its abhorrence of Northern injustice, as between the upper and the nether millstone.

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- ART. II.—1. *Elements of Logic*. By Richard Whately, D. D., Archbishop of Dublin. Boston and Cambridge: James Monroe and Company. New York: Coolidge & Brother. Philadelphia: Thomas, Cowperthwait & Company. 1848. Pp. 359.
2. *Prolegomena Logica: An Inquiry into the Psychological Character of Logical Processes*. By Henry Longueville Mansel, B. D., LL. D. Waynflete Professor of Moral and Metaphysical Philosophy, Oxford; Editor of Sir William Hamilton's Lectures; Author of 'Limits of Religious Thought,' etc., etc. Boston: Gould & Lincoln. 1860. Pp. 291.



3. *A System of Logic, Ratiocinative and Deductive; being a connected view of the Principles of Evidence and the Methods of Scientific Investigation.* By John Stuart Mill. New York: Harper & Brothers. 1846. Pp. 593.
4. *A Treatise on Logic; or the Laws of Pure Thought; comprising both the Aristotelic and Hamiltonian Analysis of Logical Forms, and some Chapters of Applied Logic.* By Francis Bowen, Alford Professor of Moral Philosophy in Harvard College. Cambridge: Sever & Francis. 1864. Pp. 450.
5. *Lectures on Logic.* By Sir William Hamilton, Bart.; Professor of Logic and Metaphysics in the University of Edinburgh, etc., etc. Boston: Gould & Lincoln. 1860. Pp. 731.

Having examined, in a previous article, the *Theories of Reasoning* propounded by others, we shall now proceed to lay before our readers what we conceive to be its real nature or mechanism. We shrink not from the same freedom and severity of criticism which we have bestowed upon others, but would invite the most searching scrutiny; and if the following analysis be not able to survive it, we shall thank the critic by whom its weakness may be detected and exposed.

In every valid argument, when fully expressed, there are three propositions: the major premiss; the minor premiss; and the conclusion. In this respect, it resembles the syllogism; but in three essential particulars it differs from the syllogism. First, the premises of a valid argument are not correctly defined in the syllogistic theory; secondly, the nature of their connection is not truly shown; and thirdly, the conclusion, instead of leading to the very particulars from which the major premiss is decided, conducts the mind to the discovery of new and unknown facts. The reasoning process, therefore, is unlike the syllogistic circle, and is an instrument of discovery. If the syllogistic theory had not thus resembled the true, it could not so long have retained its hold on the human mind; and if it had not thus differed from the true, it would not have been so long encumbered, in the minds of great thinkers, with so many doubts and difficulties.

In the first place, the major premiss of a valid argument is

unlike that of the syllogism. Indeed, if we wished to show what this premiss *is not*, we should select precisely those examples which are usually adopted by the advocates of the syllogistic theory in order to show what it *is*. According to Aristotle and his followers, the major premiss of the syllogism is an induction, or general truth inferred from certain particulars. But what is the nature of this induction or general truth? 'Induction,' says Aristotle, 'is an inference drawn from *all* the particulars which it comprehends.' Now suppose, for example, that we examine each of the planets, and finding that it is illuminated by the sun, conclude that all the planets shine with a borrowed light; this would be an Aristotelian induction. It is 'an inference drawn from *all* the particulars which it comprehends.' Suppose, again, that we say: All the planets shine with a borrowed light; but Mars is a planet; therefore Mars shines with a borrowed light;—this is an Aristotelian deduction or syllogism.. It proves only what we had before seen and observed; and leads back to one of the very particulars from which his induction took its departure. It is not wonderful, that Aristotle should have failed to observe how, according to his explanation, the deductive method resembles the argument in a circle, which he elsewhere condemns as a fallacy?

But this radical defect in the method of science, as exhibited by Aristotle, did not escape the insight of Bacon. Hence he repudiates the induction of Aristotle, (though not by name,) because it 'proceeds by the way of simple enumeration;' and rejects the syllogism founded thereon, because it never leads to any new particulars. He saw, no doubt, that the syllogism could not lead to any new particulars, or be employed as 'an instrument of discovery;' since the very induction from which it takes its departure includes *all* the particulars to which it relates. Hence he says: 'In forming our axioms from induction, we must examine and try, whether the axiom we derive, *be only fitted and calculated for the particular instances from which it is deduced, or whether it be more extensive and general*. If it be the latter, we must observe, whether it confirm its own extent and generality, by giving security, as it were, *in point*



ing out new particulars, &c.’<sup>1</sup> Thus in our induction, says he, we should aim to arrive at those ‘general axioms,’ from which new particulars may be inferred; but as to the nature of such prolific ‘axioms,’ he has given us no information. It will be found, we think, that they are such ‘axioms’ as relate, not to the *properties*, but to the *relations* of things.

The syllogism sets out from a generalized *property*; the true deductive act takes its departure from a generalized *relation*; the *dictum de omni et nullo*, the great fundamental principle of Aristotle’s whole theory, is constructed with reference to the properties of things, and not their relations. This principle declares, that whatever is true of a class; is true of every individual which it includes. But things are arranged into classes according to their properties, and not according to their relations. Hence it is evident, that his theory of deduction looked to the properties, rather than to the relations of things; and was, no doubt, constructed with reference to his own magnificent *classificatory* scheme of the animal kingdom, rather than with reference to the *inductive* sciences, which then had no existence. Indeed, if it were necessary, we might easily show by a variety of other considerations, that the syllogistic theory merely teaches the art of spinning conclusions from the common properties of classes and genera and species; but we must hasten to illustrate, and endeavor to establish, what we conceive to be the true starting point of every genuine process of deductive reasoning.

We shall begin with a well-known example. Sir Isaac Newton observed that a number of substances which possessed a high refracting power when compared with their density, were also combustible; and hence he concluded, or rather conjectured, that as the diamond possessed such a refracting power, it was likewise combustible. Now mark the nature of this process. Having seen these two attributes, a high refracting power and inflammability, so often conjoined, the idea arose in his mind that this was not merely an accidental relation of co-existence. Some common cause, or secret bond of union, was suspected to unite the two phenomena. Hence he

<sup>1</sup> Novum Organum, Book I. Aph. 106.

supposed they would be found together in other instances also. This was to generalize a relation; and the generalized relation formed the basis of his deduction. It reads thus: Substances which possess a high refracting power are inflammable; but the diamond possesses a high refracting power; therefore the diamond is inflammable. This led to a 'new particular;' to one never before suspected to exist.

This instructive instance should not be lost upon us. It throws light upon several very important points in the theory of logic. In this instance, the inference was merely probable or conjectural; because the generalized relation from which it preceded was merely probable or conjectural. If the relation had been fixed and universal, like those from which mathematical reasoning takes its departure, then the conclusion would have been demonstratively certain. But as it was, the new particular pointed to had to be verified by experiment before it could be known to be true. By reasoning from the same general relation, Sir David Brewster inferred several other new particulars, which were afterwards verified and established by experiment.

Mr. Mill seems to have had such instances in his mind, when he constructed his universal type of the reasoning process; but he did not state them correctly. Certain individuals have a given attribute, says he; another individual resembles them in some other attribute or attributes; therefore it possesses the given attribute. He supposed this was to reason from 'particulars to particulars;' because he overlooked the general relation tacitly assumed to exist between the attributes in question. Unless such a relation exist, the reasoning or inference will be good for nothing; and just in proportion as that relation is seen to be fixed, or known to be universal, will the inference based thereon carry conviction to the mind. But in all such cases, the reasoning is merely probable, and the inference uncertain. That is to say, it may be true, or it may be false; and it can never be securely relied upon until established by experiment. A hundred such cases of conjectural reasoning may be conceived, in which the inferences would be untrue, and fall before the test of an actual experience or trial. Hence it



appears that Mr. Mill has merely seized the reasoning process by one of its lower members; and even that member has been imperfectly represented by him. His type of that process, therefore, instead of being universal, is most partial and limited; including many instances of false reasoning, as well as excluding many instances of true.

Let us now ascend to a still more perfect specimen of the reasoning process; in which the conclusion is more certain, because the general relation from which it sets out is more perfectly known to exist. A canine tooth, as Cuvier remarks, is always found combined in the same animal with claws, and never with hoofs. The only bond of union which we can conceive to exist in such cases is, that the Creator of the world acts consistently with himself, and, consequently, in the formation of a beast of prey, he unites the canine tooth with the claw; both of which are adapted to tear flesh. But whatever may be the connecting link, the two things are known, as a matter of fact, to be related as parts of the same description of animals. Hence, the comparative anatomist is no sooner presented with a canine tooth, (though it should have been dug from the bowels of the earth and must have belonged to an extinct species,) than he is enabled to predict, with a very high degree of probability, that the animal to which it belonged was also armed with claws, and fed on flesh. The mental process by which he arrives at this conclusion may be thus expressed: Canine teeth and claws are always related as parts of the same animal; a certain animal possessed *this* canine tooth; therefore it possessed claws. Again: The possession of such a tooth is always united in the same animal with the habit of feeding on flesh; an extinct animal possessed such a tooth; therefore it fed on flesh. Now in these cases, as well as in hundreds of others that are familiar to every comparative anatomist, the deductive process leads to new and unknown particulars. Indeed, by the aid of the numerous relations which the inductions of his science furnish, he can, from the fragment of a single bone, reconstruct the whole animal, and describe its modes of life.

But still such conclusions are not clothed with absolute cer-

tainty. For however wide the induction, yet in the infinite variety of nature, there may be, or may have been, some animal in which the same relations were not established by the Creator. The wonderful diversity of nature, it is true, is far more observable in the external forms and superficial properties of her productions, than in their internal relations and laws; yet as these are not necessary, so we can never know them to be absolutely universal, without an inspection of all actual cases. Hence, the conclusions of the comparative anatomist are only probable, and not demonstrative; and he would, no doubt, in any given case, feel better satisfied of their correctness, if they could be verified by an actual observation of an animal belonging to a species supposed to have become extinct.

In order that our reasoning may be absolutely certain, the relation from which it sets out must be fixed and universal. We shall proceed to an example of this kind, which will present a specimen of the reasoning process in still greater purity and perfection. The relation between the time of the descent of a falling body, and the space over which it passes, is a fixed and universal relation. In all cases, the space is equal to  $16\frac{1}{2}t^2$  feet into the square of the time. Now this universal relation, though it contains no particulars, may enable us to ascertain a vast multitude of unknown facts. Suppose, for instance, we wish to ascertain the depth of a well, or the height of a tower; we need only observe the time it will take a pebble to reach the bottom of the one, or an arrow to fall from the top of the other; and then we may easily infer the fact which we wish to ascertain. If we square the number of seconds thus observed, and multiply the result by  $16\frac{1}{2}$ , this will give us the distance sought. In every other instance, likewise, in which the time may be ascertained, we may infer the space; or if the space may be ascertained, we may infer the time. Thus, by means of the general relation in question, we pass from the known to the unknown, and discover 'new particulars.' The science of mechanics, as well as physical astronomy, is replete with similar instances, in which we infer numerous new particulars, or facts, by reasoning from 'general axioms' concerning *the relation of things*.



But let us look into this process more closely, and see its exact mechanism more clearly. The first proposition, or major premiss, is a generalized relation; it is not a property predicated of a class of things, but a relation subsisting between two classes of things. It includes no particulars. The minor premiss, or the succeeding proposition, is a particular case of the 'general axiom,' in which one of the terms related has been ascertained. Having ascertained that term of the things related which was accessible to observation, we infer the other term by means of its known relation to the first, so that it becomes known itself. Suppose, for example, the time which a body takes to fall from the top of a tower is seen to be six seconds. We learn this fact from observation, and from this fact we infer the height of the tower. Now this conclusion is not contained in the major premiss; and is altogether a new particular. The height of the tower, which was before unknown, is ascertained to be 579 feet. This conclusion is so far from being contained in the major premiss, as the conclusion of the syllogism is, that it cannot be drawn at all, until some other particular be ascertained, and made the basis of the minor premiss. In the above case, for example, the process stands thus: The height is always equal to  $16\frac{1}{2}$  feet into the time squared; but the time is six seconds; therefore the height of the tower is  $16\frac{1}{2} \times 6^2$ , or 579 feet. This inference is drawn, it will be perceived, not as in the syllogism by means of a *middle term*, which is always a common property, but by means of a known relation. Thus, in every process of deductive reasoning, we pass from the known to the unknown, by means of the relation subsisting between them, and not by means of any property common to them. If we attempt to do so in this way, we shall syllogise merely; and, instead of making progress, we shall eternally revolve in a circle. We shall never get one inch beyond the limited knowledge we already possess. We may say, if we please, that all *animals* are living creatures; that all men are *animals*; and therefore all men are living creatures; but though we should repeat this, or a thousand similar processes, to the end of time, we should never get beyond the particulars already known to us, and without a knowledge

of which the major premiss itself could never have been admitted as true.

The conclusion of the above example does not give the height of the tower with mathematical precision, because the resistance of the atmosphere was not taken into consideration. In like manner, the reasoning which infers that a substance is combustible, because it possesses a high refracting power, might prove, not defective merely, but false; in consequence of some cause, or combination, which it had overlooked. Such grounds of uncertainty exist in some of the physical sciences; while such grounds of inaccuracy alone exist in others. But the process of reasoning is the same in all. Whether it points to a doubtful conclusion, which experiment may verify or refute, or whether it certainly leads to an approximation to the truth, yet is the process itself always one and the same,—taking its departure from a generalized relation, and landing the mind in the knowledge of a ‘new particular.’ If the generalized relation, from which it sets out, be only probable or conjectural, then will the conclusion likewise be only probable or conjectural; and, on the other hand, if the generalized relation be clear, certain, and universal, then will the conclusion be demonstratively true. In one word, the inference will partake of the uncertainty and weakness, or of the certainty and strength, of the major premiss, or ‘general axiom,’ according to which it is drawn.

The grounds of uncertainty and inaccuracy here glanced at, have no place in the pure mathematics; and hence it is to this science that we should look for the most luminous type of the reasoning process. And here, if we mistake not, we find the foregoing theory most abundantly confirmed, as well as most luminously exhibited. It may seem strange, indeed, that so great a diversity of opinion should prevail respecting the nature of reasoning; since it is on all hands conceded, that its truest and purest type is to be found in the elements of geometry. But clearly as this process *may* be seen in geometry, we shall have to gaze with an exceedingly close and steady eye, or we shall not perceive it therein at all, except as distorted and confused. Each act of ratiocination is performed with such incon-



ceivable rapidity, and is everywhere so intimately associated, not to say blended, with acts of simple inspection, or of memory, or with other mental operations, that he who shall endeavor to seize the thread of the reasoning process alone, and follow it through the tangled web of the whole, will soon find that he has entered upon no very easy task. The results of geometry are sufficiently plain, and may be easily apprehended; but if we would penetrate the complicated tissue of the mental processes by which these results have been produced, and undertake to designate the precise steps and elements which are due to any one of those processes, we shall soon discover that the difficulty of the task is one of no small magnitude. If we happen to hold the true theory of ratiocination in our hand, this may help to conduct us safely, and with a steady unconfused eye, through this metaphysical labyrinth of flitting shadows.

We shall begin with the circle; because to the reasonings concerning this curve, a very celebrated mathematician and philosopher has appealed as presenting the universal type of all ratiocination. 'All the steps of a demonstration,' says Mr. Whewell, 'may be stated in the shape in which logicians are accustomed to exhibit processes of reasoning in order to show their conclusion, that is, in *Syllogisms*. Thus all our geometrical reasonings might be resolved into such steps as the following: All straight lines drawn from the centre of a circle to its circumference are equal: but the straight lines AB, AC, are drawn from the centre of a circle to its circumference: therefore the straight lines AB, AC, are equal.'<sup>2</sup> There is no such reasoning as this to be found in geometry. The very essence of the circle consists in this, that all its radii are equal; and, accordingly, the idea of equality existing among all its radii enters into every definition of the circle. And this being the case, it can surely require no argument, or reasoning, to satisfy the mind that any two of its radii are equal. Indeed, the major premiss of the foregoing syllogism, that all the radii of the circle are equal, is equivalent to the assertion that any two of them are equal. Hence, the attempt to prove that two par-

<sup>2</sup> Philosophy of the Inductive Sciences. Vol. I. Book 1, Ch. 6.

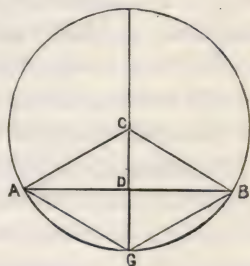
ticular radii are equal, by reasoning from the position that all or any two of them are so, is an attempt to establish particulars already perfectly known, and a knowledge of which was essential to the construction of the major premiss itself. This is not to reason, therefore, but merely to pass from the enunciation of many particulars, to some one or more of the particulars enunciated; for what is true of any two radii, it requires no logic to convince us, is true of the two radii AB and AC. It is not to proceed from truth to truth, or from thought to thought; it is only to pour one and the same idea out of one mode of expression into another.

We do not object to such processes; for such is the littleness and weakness of the human mind, that it often derives support from viewing the same idea in different lights, or by transferring it from one mode of expression into another. It is only when such a process puts on logical forms, and attempts to dignify itself with the title of ratiocination, that we raise our voice against the imposition and the cheat. And we raise it the more earnestly, because in the literary and scientific productions of the learned, we have often met with such pompous manifestations of logical prowess. Nothing is more common, indeed, than the attempt to prove things, too plain for argument, by running round in the syllogistic circle. In almost every question of great difficulty, too, the human mind, if we may judge from the labors of the past, is exceedingly prone to satisfy itself, and find rest, in *demonstrations* which consist of identical propositions merely, and which go forth only to return to themselves again. The sooner all such pompous pretensions, as well as all such exquisitely insignificant performances, be exploded, the better. But while we contemplate the weakness, we should also behold the glory of man. The sublime act of ratiocination, by which he is distinguished from the inferior animals, is something greater and better, we believe, than the process by which we descend from the general conception that all the radii of a circle are equal, to the grand conclusion that two of them are so!

But to return from this short digression.



Let it be required to prove, that a radius perpendicular to a chord, bisects the chord, and bisects also the arc subtended by the chord. This is really one of the theorems of geometry; and here, accordingly, we may find a perfect specimen of the reasoning process. Let  $AB$  be a chord, and  $CG$  the radius perpendicular to it: then will  $AD = DB$ , and the arc  $AG = GB$ .



To prove this, draw the radii  $CA$ ,  $CB$ . These radii are equal *exhypothesi*. The two triangles  $ACD$ , and  $CDB$ , are right-angled triangles by construction; and, by simple inspection, they are seen to possess the common side  $CD$ . Now in all this there is no reasoning. So far it has appeared, partly from the idea of a circle, partly from simple inspection, and partly from the construction, that the two right-angled triangles  $CAD$  and  $CDB$ , have the hypotenuse and a side of the one, equal to the hypotenuse and a side of the other, each to each. This having been ascertained, the act of reasoning begins, and stands thus:

If two right-angled triangles have the hypotenuse and a side of the one, equal to the hypotenuse and a side of the other, each to each, their remaining sides will be equal; (this general relation has already been demonstrated, and is true of all right-angled triangles;) but the particular right-angled triangles,  $CAD$ , and  $CDB$ , have a side and the hypotenuse of each equal to a side and the hypotenuse of the other; therefore their remaining sides,  $AD$  and  $DB$  are equal; which is the thing to be demonstrated.

Here, it will be perceived, the major premiss is a general relation, which has been demonstrated to subsist among the parts of all right-angled triangles. The minor premiss asserts, what was ascertained in the manner above described, namely, that the parts of the two right-angled triangles in question, which stand on one side of this relation, are equal. From this the conclusion follows, that the parts which stand on the other side of

the relation are also equal. This is in perfect accordance with the type of the reasoning process given by us. The major premiss is a general relation: one of the terms related (independently ascertained) forms the minor premiss: the other term related is inferred according to the major premiss.

The remaining branch of the demonstration is an equally clear verification of our theory. Since AD and DB are equal, the perpendicular CG is erected at the middle of AB. General relation: Every point of this line is equally distant from the two extremities A and B. Particular instance: G is one of the points thus related to A and B. Conclusion: therefore GA and GB are equal. General relation: Equal chords in the same circle always subtend equal arcs. Particular instance: GA and GB are equal chords in the same circle. Conclusion: Therefore the arcs AG and GB subtended by them are equal.

Such a process conducts the mind to new particulars. It enables us, by means of a general relation, to pass from particulars already ascertained by means of observation, or by a preceding demonstration, to other and unknown particulars. It leads from truth to truth, and from discovery to discovery. It is not a word which goes forth and returns unto itself void; it comes back crowned with the glories of science. If it were necessary, we might show that all the beautiful theorems respecting the circle, and the still more beautiful ones respecting the sphere, are demonstrated by precisely the same process as that above indicated. But other branches of the mathematics must now claim our attention.

If our views be correct, we can never pass from the known to the unknown by reasoning, unless we can first establish a relation between them. This is pre-eminently true in regard to all the processes of algebra. In every attempt to ascertain an unknown quantity by means of algebra, the very first step is to obtain an equation, which shall truly state the relation subsisting between the unknown quantity and known ones; and we must always have as many equations as unknown quantities. We have carried our inquiries through the most complicated and difficult processes of this branch of the science; but for our



present purpose, it will suffice to confine our remarks to a single example.

Let us suppose, then, that we have the equation,  $x + \frac{1}{2}x + \frac{1}{3}x = 11$ ; and the value of the unknown quantity is required. This equation expresses the relation between known quantities and the one sought; but it does not so express this relation, that we can immediately infer the value of the latter. Hence we must ascertain this value by a process of reasoning; which will be as follows:

If equals be multiplied by the same quantity the products will be equal:

But the members of the above equation are equal: Therefore if they be multiplied by six the products will be equal. That is to say,  $6x + 3x + 2x = 66$ ; or,  $11x = 66$ . Again:

If equals be divided by the same quantity the quotients will be equal.

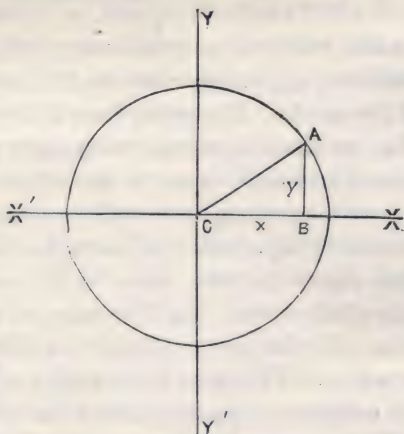
But the members of the last equation are equal:

Therefore if they be divided by eleven, the quotients will be equal. That is to say,  $x = 6$ . It is evident that whether we seek to obtain the value of  $x$  by multiplying and dividing, or by adding and subtracting, the logical process is the same; and always conforms to the universal type of valid reasoning above propounded.

One advantage which algebra possesses over arithmetic is, that by means of signs and symbols the relations between unknown quantities and known ones, are more easily expressed; and the symbols are more easily dealt with than the quantities which they represent. A precisely analogous advantage is possessed by analytical over synthetical geometry. In this branch of mathematics, symbols are used to represent, not numerical values as in algebra, but the spatial values of geometry. Nor can one step be taken in reasoning about the lines of analytical geometry, until the equation of the line be constructed; which equation expresses the common relation which subsists between all the abscissas of the line on the one hand, and the corresponding ordinates on the other. Then, by means of this general relation, if we give a value to any one abscissa, we may find the corresponding ordinate; and thereby determine a

point of the line, and also, perhaps, some one of its properties. Thus, in the reasonings of analytical geometry, we set out from a uniform relation as the major premiss; we assign a certain value to one of the things related; and then, by means of the uniform relation, we ascertain the other thing related.

To give a single illustration: Let  $XX'$  be the axis of abscissas, and  $YY'$  the axis of ordinates; having the centre of a circle at the origin of co-ordinates at  $C$ . Let  $x$  represent any abscissa as  $CB$ , and  $y$  the corresponding ordinate  $BA$ . Now, no matter how  $CB$  may be varied, though it should move through all possible values from zero to radiu



yet will it always bear a certain fixed relation to the corresponding line or ordinate  $BA$ . This relation is such, that the sum of the squares of these two lines is always the same quantity; or the square of the radius  $CA$ . This is evident, for the square on the hypotenuse, is always equal to the sum of the squares on the other two sides. If  $R$  represent the radius of the circle, then we shall have the equation:

$$x^2 + y^2 = R^2,$$

which expresses the relation between  $x$  and  $y$  for every point of the circle. Hence this is called the equation of the circle.

It is evident, that if the point  $B$  be made to approach  $C$ , the origin of co-ordinates, until it reaches  $C$ , at which point  $x$  will become zero, the corresponding value of  $y$  will be equal to radius. This fact, which is thus seen by an inspection of the diagram, may be shown by reasoning from the above equation. For if we make  $x =$  to zero, the equation will become  $y^2 = R^2$ , or  $y = R$ . In like manner, it might be shown, by reasoning, from the equation, that when  $y$  is zero,  $x$  will be equal to ra-



dus; and we should have the distance from the origin of co-ordinates at which the curve cuts the axis.

But let us find the value of  $y$  in the above equation; which is easily done by transferring  $x^2$  to the second member, and extracting the square root of both members.

We have,  $y = \pm \sqrt{R^2 - x^2}$ , which is another expression for the relation between *every* ordinate and its corresponding abscissa; or, in other words, it is another form of the equation of the circle. It appears from this equation, that for each value of  $x$ , we shall have two values of  $y$ ; the one plus and the other minus, and each equal to the other in length. That is to say, for each abscissa, there will be two ordinates of equal length; the one lying above and the other below<sup>3</sup> the axis of abscissas. This shows that the circle is symmetrical with respect to the axis of abscissas. In like manner, we might proceed to determine all the properties of the circle, by reasoning from its equation. The same thing is true of the other conic sections; of the ellipse, the parabola, and the hyperbola.

This process of reasoning, it will be readily seen, corresponds with the type already given. In the first place, its starting point is the fixed and universal relation which subsists between two classes of lines. The minor premiss enounces the value of *one* of the lines thus related; and the inference, by means of the general relation expressed in the major premiss, fixes the value of the other.

As our reasonings are carried on by means of relations, it makes no difference, in point of correctness, whether they be conducted with reference to symbols or with reference to the objects represented by them; provided the *same relations* be established among the symbols, which obtain among the objects themselves. This consideration at once explains the legitimacy of all analytical reasoning, and lets us into the secret of its wonders. The physical astronomer, for example, having truly expressed the relations of things by means of his signs and symbols, dismisses all the stupendous and unwieldy objects of the science from his consideration, and proceeds to deal with

<sup>3</sup>The plus value is reckoned above and the minus value below the axis  $XX'$ .

their puny representatives, until the most sublime discoveries are made respecting the mechanism of the universe.

Analytical geometry can, by means of its symbols, deal very well with the more regular curves, such as the conic sections, and bring their singularly beautiful properties to light. But there are plane curves, given by their equations, with whose properties analytical geometry cannot grapple. Let it be required, for example, to determine for each point of a plane curve, the equation of which is given, the direction of its tangent, and this instrument of science may prove powerless in our hands. It can pass from the equation of a conic section to that of its tangent, and thereby bring this within the domain of a rigorous logic; but it cannot do the same thing for all plane curves given by their equations. Hence the human mind, being unable to establish the relation desired, was at a stand, and waited to have this obstacle to its progress removed. It was with a view to surmount this difficulty, that Newton and Leibnitz invented the differential and integral calculus. Unable to find the equation sought, by direct means, they accomplished it by the indirect method of the calculus which they invented. Instead of expressing the relation between the co-ordinates of the tangent sought, which relation they could not directly find, they first expressed the relation which obtains between the infinitely small elements of those co-ordinates. This relation, for all curves of the kind described, was easily conceived and expressed. Then, by a process of elimination, the infinitely small elements were got rid of; and the relation between the quantities themselves was obtained. Thus, what could not be accomplished directly, was effected indirectly, and the former bounds of the mathematical science were over-leaped. Relations were established, which could not before be conceived or expressed, and the reasoning power was enlarged. The method which had proved so successful in treating of tangents, was extended to other subjects, and with like success. General relations were thus established, without which the reasoning process could not take its first step; and problems were grappled with which before lay beyond the domain of human science. In one word, the calculus of Leibnitz and



Newton having established new starting points for the deductive process, the reasoning power entered on a fresh career of glory.

We have now done with this branch of our subject. We have seen that the mathematics, from the first elements of algebra and geometry to the last results of the transcendental analysis, is *one* science; resting on the same foundation, and everywhere pervaded by one and the same logical process. We have also seen, that, in spite of the opinion of logicians, deductive reasoning *does lead to new particulars, and is an instrument of discovery*. But we have not yet done justice to this subject. It still remains to be seen how important is the part which this method performs in rearing the fabric of human science; and as this is a merit but little considered, and usually denied, we shall discuss it fully, and render it as clear as the noon-day sun.

We have already noticed, and promised to notice again, the following language of Mr. Stewart: 'It is an observation which has been often repeated since Bacon's time, and which, it is astonishing was so long in forcing itself on the notice of philosophers, That, in all our reasonings about the established order of the universe, experience is our *sole* guide, and knowledge is to be acquired *only* by ascending from particulars to generals.' The words of Mr. Whewell are equally strong and explicit. 'This doctrine,' says he 'that logical reasoning produces no new truths, but only unfolds and brings into view those truths which were, in effect, contained in the first principles of the reasoning, is assented to by almost all who, in modern times, have attended to the science of logic.' This remark is no doubt true; and there is not, perhaps, in the history of philosophy a more striking exhibition of the influence of theory over the power of observation, than that which is presented in this unanimous assent<sup>4</sup> of modern philosophers. The real fact is, that innumerable new truths of the most magnificent description, have been ascertained and established by *deductive reasoning*; and these truths are now blazing on all sides around us. They are indeed the great lights of science. We might

<sup>4</sup> Sir John Herschel should be excepted.

illustrate the justness of this remark, by a reference to the truths of every department of human science; but we shall confine our attention to those of optics and astronomy, and, proceeding from truths of the least importance, shall gradually ascend to the consideration of the most sublime discoveries.

But before we enter on this inquiry, we must briefly notice the manner in which the opposite side of the question is sometimes discussed. 'In maintaining the negative side' of the question, 'Whether it is by a process of reasoning that new truths are brought to light,' Archbishop Whately takes care to premise, 'that by a "new truth" be understood something not expressly nor virtually asserted before,—not implied and involved in anything already known.' Now this is to say, that if by a 'new truth' we mean something which cannot be inferred from our premises, then no new truth can be inferred from our premises! Whatever else may be thought of such a position, it is surely a very safe one; for who can believe that what cannot be inferred from our premises *can* be inferred from them? But, such being the nature of the author's position, as defined by himself, he might very well have spared himself all the subsequent labor of argumentation and proof to convince us that nothing can be inferred from what we already know, except such things as are implied or involved therein.

The proceeding of Archbishop Whately herein is not in conformity with the laws of philosophical controversy. If such a proceeding were admissible, it would be easy to show that new truths are never discovered by induction; for if by a new truth be meant something which is 'not implied or involved in anything already known,' it is clear, that it can never be inferred from known particulars, or by a process of induction. But if this, or any other question, is to be discussed at all, we should not attach an arbitrary meaning to its terms, or any such meaning as would, *ex vi termini*, decide the very point in controversy. Hence, in maintaining that new truths have been discovered by deductive reasoning, we shall mean by *new truths* those only which were allowed to be such at the time of their discovery. We shall simply mean truths that were utterly unknown to the mind of man, until they were brought to light



by a process of deductive reasoning. This is what we shall mean; and this is what we shall endeavor to establish.

To begin with optics, it will be conceded that it was a sufficiently novel idea, that if two rays of light be made to proceed from certain points, and to fall on precisely the same given spot, the result will be darkness. Yet this result was first *made known by mathematical reasoning*; and afterwards the prediction was verified by experiment. Thus, where every one would have looked for a double illumination, the reasoning of the mathematician declared there would be darkness; and the prediction proved to be a fact. On the other hand, the reasoning of the mathematician, which is universally allowed to be deductive, has truly predicted light, where every person would naturally have expected darkness. In the words of Sir John Herschel, 'An eminent living geometer had proved, by calculations founded on strict optical principles, that in the *centre of the shadow* of a small circular plate of metal, exposed in a dark room to a beam of light emanating from a *very small brilliant point*, there ought to be no darkness,—in fact, *no shadow* at that place; but, on the contrary, a degree of illumination precisely as bright as if the metal plate were away. *Strange and even impossible as this conclusion may seem, it has been put to the trial and found perfectly correct.*'<sup>5</sup> Striking and curious as such facts are, they are but small matters when compared with the grand disclosures of deductive reasoning.

The manner in which the phenomena of *circular polarization* were anticipated and discovered beforehand by a great French mathematician, M. Fresnel, is one of the most remarkable events in the history of optics. Having applied his formulas for the polarizing effect of reflection to a certain case, he obtained what mathematicians call an impossible quantity, or an imaginary expression. 'I interpreted,' says he, 'in the manner which appeared the most natural and most probable, what the analysis indicated by this imaginary form.' Wonderful as it may seem, his interpretation of this imaginary or impossible quantity, enabled him to describe beforehand the very remarkable phenomena of *circular polarization*; and, as Mr. Whewell

<sup>5</sup> Discourse on the Study of Natural Philosophy, Part I. chap. 2.

says, 'this extraordinary anticipation was exactly confirmed.'<sup>6</sup>

This is not the only wonder which M. Fresnel has made the mathematical analysis achieve. After having spoken of the calculations of a naval officer, and the most astonishing fulfilment of the conclusion founded thereon, Sir John Herschel continues: 'But even such results, striking as they are, yet fall far short of the force with which conviction is urged upon us when, through *the medium of reasoning too abstract for common apprehension, we arrive at conclusions which outrun experience, and describe beforehand what will happen under new combinations*, or even correct imperfect experiments, and lead us to a knowledge of facts contrary to received analogies drawn from an experience wrongly interpreted or overhastily generalized. To give an example:—Everybody knows that objects viewed through a transparent medium, such as water or glass, appear distorted or displaced. Thus a stick in water appears bent, and an object seen through a prism or wedge of glass seems to be thrown aside from its true place. This effect is owing to what is called the *refraction* of light; and a simple rule [a general relation] discovered by Willebrod Snell, enables any one to say exactly how much the stick will be bent, and *how far*, and in what *direction*, the apparent situation of an object seen through the glass will deviate from the real one. If a shilling be laid at the bottom of a basin of water, and viewed obliquely, it will appear to be raised by the water; if, instead of water, spirits of wine be used, it will appear more raised; if oil, still more. But in none of these cases will it appear to be thrown *aside* to the *right* or *left* of its true place. The *plane*, in which are contained the eye, the object, and the point in the surface at which the object is seen, is an upright or *vertical* plane; and this is one of the principal characters in the *ordinary refraction* of light, viz., that the ray by which we see an object through a refracting surface, although it undergoes a bending, and is, as it were, broken at the surface, yet in pursuing its course to the eye, does not *quit a plane perpendicular to the refracting surface*. But there are again other substances, such as rock-crystal, and especially Iceland spar, which possess

<sup>6</sup>History of the Inductive Sciences, Vol. II. Book IX. ch. 13.



the singular property of doubling the image or appearance of an object seen through them in certain directions; so that, instead of seeing one object, we see two, side by side, when such a crystal or spar is interposed between the object and the eye; and if a ray or small sun-beam be thrown upon a surface of either of these substances, it will be split into two, making an angle with each other, and each pursuing its own separate course; this is called *double refraction*. Now, of these images or doubly refracted rays, *one* always follows the same rule as if the substance were glass or water; its deviation can be correctly calculated by Snell's law above mentioned, and it does not quit the plane perpendicular to the refracting surface. The other ray, on the contrary, (which is therefore said to have undergone *extraordinary refraction*,) *does* quit that plane, and the amount of its deviation from its former course, requires for its determination a much more complicated rule, which cannot be understood, or even stated, without a pretty intimate knowledge of geometry. Now, rock-crystal and Iceland spar differ from glass in a very remarkable circumstance. They affect, naturally, certain regular figures, not being found in shapeless lumps, but in determinate geometrical forms; and they are susceptible of being cleft or split in certain directions much easier than in others—they have a *grain*, which glass has not. When other substances having this peculiarity (and which are called crystalized substances) were examined, they were all, or by far the greater part, found to possess this singular property of *double refraction*; and it was very natural to conclude, therefore, that the same thing took place in all of them, viz., that of the two rays, into which any beam of light falling on the surface of such a substance was split, or of the two images of an object seen through it, *one* only was turned aside out of its *plane* and *extraordinarily refracted*, while the other followed the *ordinary* rule. Accordingly, this was supposed to be the case;<sup>7</sup> and not only so, but, from some trials and measurements purposely made by a philosopher of great eminence, it was considered to be a fact sufficiently established by experiment.

<sup>7</sup> If Mr. Mill's type of the reasoning process be correct, such a conclusion would have been well founded.

‘Perhaps we might have remained long under this impression, for the measurements are delicate, and the subject very difficult. But it has lately been demonstrated by an eminent French philosopher and mathematician, M. Fresnel, that, granting certain *principles* or postulates, all the phenomena of double refraction, including perhaps the greatest variety of facts that have ever yet been arranged under one general head, may be satisfactorily explained *and deduced from them by strict mathematical calculation*; and that, when applied to the cases first mentioned, these principles give a satisfactory account of the *want* of the extraordinary image; that, when applied to such cases as those of rock-crystal or Iceland spar, they also give a correct account of both the images, and agree in their conclusions with the rules before ascertained for them; but so far from coinciding with that part of the previous statement, which would make these conclusions extend to all crystallized substances, M. Fresnel’s principles lead to a conclusion quite opposite, and point to a *fact which had never been observed*, viz., that in by far the greater number of crystallized substances which possess the property of double refraction, *neither* of the images follows the ordinary law, but both undergo a deviation from their original plane. *Now this had never been observed to be the case in any previous trial, and all opinion was against it.* But when put to the test of experiment in a great variety of new and ingenious methods, it was found to be fully verified; and, to complete the evidence, the substances on whose imperfect examination the first erroneous conclusion was founded, having lately been subjected to a fresh and more scrupulous examination, the result has shown the insufficiency of the former measurements, and proved in perfect accordance *with the newly-discovered laws*. Now, it will be observed in this case, first, that, so far from the principles assumed by M. Fresnel being at all obvious, they are extremely remote from ordinary observation; and, secondly, that the chain of reasoning by which they are brought to the test, is one of such length and complexity, and the purely mathematical difficulty of their application is so great, that no *mere good* common sense, no general tact, or ordinary practical reasoning, would afford the



slightest chance of threading their mazes. Cases like this are the triumph of theories. *They show at once how large a part pure reason has to perform in our examination of nature, and how implicit our reliance ought to be on that powerful and methodical system of rules and processes which constitute the modern mathematical analysis, in all the more difficult applications of exact calculation to her phenomena.*'<sup>8</sup>

Now the principles which M. Fresnel assumed as the basis of his calculations, and which led to such extraordinary results, were those of the undulatory theory of light. Such are, indeed, but a few of the brilliant triumphs which, since the labors of Young and Fresnel commenced, have distinguished that theory in its conflicts with the rival hypothesis. In the explanation of new and complicated phenomena, as they have risen to view, as well as in the anticipation of the most wonderful phenomena which had not risen to view, this theory has, at length, far outstripped its rival, and gained a vast pre-eminence in the estimation of philosophers. Even Sir John Herschel, who was formerly an advocate of the emission-theory of light, uses the following language in an article of the *Encyclopædia Metropolitana*: 'The unpursued speculations of Newton, and the opinions of Hooke, however distinct, must not be put in competition, and, indeed, ought scarcely to be mentioned, with the elegant, simple, and *comprehensive* theory of Young.' We may safely go further, indeed, and adopt the conclusion of Mr. Whewell: 'Thus this beautiful theory,' says he, 'corrected, while it explained, the best of the observations which had previously been made, and offered itself to mathematicians with an almost irresistible power of conviction. The explanation of laws so strange and diverse as those of double refraction and polarization, by the same general and symmetrical theory, *could not result from anything but the truth of the theory.*'<sup>9</sup>

But here the question is, how has this theory been established, or shown to be true? We answer, by the method of deduction, by 'logical reasoning.' One of the ways in which geometry demonstrates its propositions is, by reasoning from them as

<sup>8</sup> Discourse on the Study of Natural Philosophy, Part I. ch. 2.

<sup>9</sup> History of the Inductive Sciences, Vol. II. p. 458.

from mere assumed hypotheses, and then inferring them to be true, because the conclusions to which they lead are known to be so. Precisely in the same way, and in no other, has the truth of the theory in question been demonstrated. It offers itself to mathematicians with an almost irresistible power of conviction, because its evidences are *mathematical*. We know it to be true, because all the reasonings founded thereon either lead to known truths, or else point to new ones. In the words of Mr. Whewell: 'Truth may give rise to such a coincidence; falsehood cannot. But the phenomena become more numerous, more various, more strange. No matter: the theory is equal to them all. It makes not a single new physical hypothesis, but out of its original stock of principles it *educes the counterpart of all that observation shows*. It accounts for, explains, simplifies, the most entangled cases; *corrects known laws and facts; predicts and discloses unknown ones; becomes the guide of its former teacher, observation; and, enlightened by mechanical conceptions, acquires an insight which pierces through shape and color to force and cause.*'<sup>10</sup> Thus, if this theory were not suggested, yet is its truth brought to light, by mathematical, or deductive, reasoning.

Does it not appear, then, that in affirming that no new truths are brought to view by deductive reasoning, Mr. Whewell was guided by the authority of great names, rather than by the lights which his own *History of the Inductive Sciences* has set before us? If no new truth is ever educed by mathematical reasoning, how has it happened that the calculations of a Fresnel enabled him, not only to 'correct known laws and facts,' but also 'to predict and disclose unknown ones?' If such reasoning never leads to a new truth, how has it brought to view the truth of a once rejected theory; not only showing it to be true, but also converting it into a fountain of other truths? Indeed, how large soever may be the portion of 'Formal Optics,' which the *inductive method* has produced, yet has the science of 'Physical Optics,' the last result and the crowning glory of the whole, been created by the *method of deduction*. The multifarious facts and laws of optics were, indeed, but the

<sup>10</sup> History of the Inductive Sciences, Vol. II. p. 466.



disjointed members and fragments of a science, until, being pervaded and informed by this method, they were harmonized into *one*, and the organic whole irradiated with the light of a central truth.

This is not all. The reasoning process is used in optics, as in geometry, both to establish theorems by throwing back the irresistible light of its conclusions upon its assumed premises, and also to solve a great variety of the most beautiful problems. We regret that we cannot dwell on this branch of the subject; that we must confine our attention to a single example, or else omit considerations which have a more direct and impressive bearing on the question before us. Suppose it be required, then, to determine the form of a convex lens, which will cause parallel rays incident in the direction of its axis, to converge exactly at the remoter focus. Now whether this problem be solved by the application of pure geometry to the principles of optics, as in the *Natural Philosophy* of Olmstead,<sup>11</sup> or by a purely analytical process, as in the *Optics* of Bartlet, the form and construction of such a lens will be ascertained by *deductive reasoning*. This will not be denied. And it will be found that such a lens is generated by the revolution of an ellipse about its major axis, when that major axis is to the distance between its foci, as the sine of the angle of incidence is to the sine of the angle of refraction. The solution of this singularly beautiful problem, is not only of great practical importance in the construction of lenses so as to avoid the indistinctness of vision arising from the spherical aberration of light, but it also establishes a new point from whence, as we may readily see, the deductive act ascends to the sublime conclusion that there is a God. For we have before us, in the aqueous humor of the eye, an example of a lens thus curiously constructed; displaying a knowledge both of the laws of optics, and of the principles of mathematics. 'Its figure is such an ellipsoid, the ratio of whose major axis to the distance between the foci, is almost precisely the same with that which exists between the sines of incidence and refraction; the former ratio being expressed by 1.3, and the latter by 1.337.' Thus the humor of the eye is

<sup>11</sup>Part VIII. Chap. 4.

admirably constructed, and with almost mathematical precision, so as to avoid the spherical aberration of light, and subserve the purposes of vision.<sup>12</sup>

We shall now take leave of optics. We have seen that its foundations have been secured, its boundaries enlarged, and its obscurities cleared up, by mathematical reasoning; which, on all sides, is allowed to be purely *deductive*. We shall barely remark, in passing, that the service which the deductive method has rendered to some other departments of knowledge, is scarcely less important than that which it has performed in the creation of the beautiful science of optics. Its greatest triumphs, however, are those which it has achieved on the magnificent arena of astronomy.

The fundamental fact in physical astronomy, or rather the first link in the chain of our knowledge of physical astronomy, is the length of the earth's radius. This forms the basis of all the calculations of the physical astronomer. But this basis is not measured, nor learnt by observation; it is ascertained by a process of purely mathematical or deductive reasoning. In the first place, the circumference of a great circle of the earth is determined partly by observation and partly by calculation; and all the rest is the result of logical inference. We know, for instance, the ratio or relation existing between the circumference of every circle and its radius; and this constitutes the major premiss of our argument. Then, having ascertained the circumference of the earth, we infer, by means of the general relation expressed in the major premiss, the exact length of its radius. As is well known, until a degree of the earth was more accurately measured, with a view to ascertain its circumference, Newton himself failed in the attempt to take the first and indispensable step toward the erection of the vast fabric of physical astronomy. This step had been taken, indeed, but not with sufficient precision for the purposes of science; and the primary error spreading through all subsequent calculations, and growing as it spread, the conclusions failed to represent the real order and beauty of the world. The science of

<sup>12</sup> If we only understood the whole of the case, we should no doubt see that this very slight theoretical imperfection is, in some way or other, inseparably connected with a practical advantage.



physical astronomy became possible only then, when a more accurate determination of the earth's circumference enabled the deductive method to infer, with greater precision, the length of the earth's radius.

The next step which it is necessary to take is, the determination of the moon's distance from the earth. This step is likewise taken by a purely deductive process. We first observe the horizontal parallax of the moon, or the angle formed by two lines drawn to the moon when in the horizon, the one proceeding from the centre, and the other from the surface of the earth. In the right-angled triangle thus formed, or rather, conceived to be formed, we shall have one side and one angle, namely, the radius of the earth and the horizontal parallax of the moon. But trigonometry demonstrates the relations which exist between the parts of all right-angled triangles. Hence, after having ascertained one side and one angle of the particular right-angled triangle in question, we may easily infer the other side, which is the distance of the moon from the earth. Now, if the orbit of the moon were a perfect circle, we might at once and by a single deductive act pass from the distance thus ascertained, which would be the radius of its circular orbit, to the length of the orbit itself. As we passed from the circumference to the radius of the earth, so we might then pass from the radius to the circumference of the moon's orbit. But since the moon's orbit is not a perfect circle, any more than the earth is a perfect sphere, we must make more observations than one, and more calculations than one, in order to construct this orbit with sufficient precision for the purposes of physical astronomy.

Thus having determined the distance of the moon, suppose it be next required to ascertain its magnitude. This is easily accomplished by means of the mathematical formula, which expresses the universal relation between the apparent and the real diameters of such objects, for every assignable distance. But the distance of the moon is known, and its apparent diameter may be determined by observation. Hence by means of the formula, or relation in question, we might infer the real diameter of the moon. As by the preceding inference the dis-

tance of the moon is found to be equal to sixty times the radius of the earth, so by this its diameter is shown to be 2,161 miles. Having thus ascertained its diameter, the demonstrated relations of geometry enable us to pass from thence over to its circumference; thence again to the area of its surface; and thence again to its solid contents or geometrical magnitude.

Suppose, in the next place, that we are required to determine the *mass* of the moon. For this purpose, we shall begin by determining the *mass* of the sun, or its quantity of matter. This may be easily done by simply weighing it over against the earth thus: the attractive force of the sun is equal to the centrifugal force of the earth, for the one force is exactly balanced by the other. But the centrifugal force of the earth may be easily calculated; and the calculation shows that it is equal to about 355,000 times the force of attraction which the earth would exert on a body *placed at the distance of the sun*. The attractive force of the sun, then, is 355,000 times that of the earth. Here we must recollect the general relation that the mass of a body, or its quantity of matter, is exactly proportional to its attractive force; a relation which has been established by a series of the most incontestible experiments. This general relation applied to the particular case before us gives: the attractive force of the earth is to its mass as the attractive force of the sun is to its mass. But we have found that the attractive force of the sun is to that of the earth as 355,000 : 1; hence the same ratio obtains between their masses. In other words, there is 355,000 times the quantity of matter in the sun that there is in the earth.

This determined, we next observe the effects produced by the mass of the sun and those produced by the mass of the moon, in raising the tides of the sea; and then, by comparing these effects, we obtain the ratio between the masses by which they are respectively produced. But in comparing these effects we must, of course, allow for the different distances at which the two bodies are from the earth; which allowance is easily made by the relation that the attractive force of a body is always inversely proportioned to the square of its distance from the body attracted. By keeping these things or *relations* in



mind, we may easily calculate the mass of the moon, or its quantity of matter. Now, observe the steps of this process. We first notice and determine the *effects* produced by the attractive forces of the sun and of the moon for different distances; and then, by means of a well-known law or relation, we infer the attractive forces themselves for the same distances. Having thus found the ratio of the attractive forces for the distances in question, we calculate, by means of another well-known relation, what the ratio of these forces would be for the same distance; which ratio is the same as that existing between the *masses* of the two bodies by which the forces are exerted. The ratio between the masses of the sun and moon being thus found, and the mass of the sun having been determined, that of the moon may be easily inferred or calculated.

By perfectly similar processes, the distances, the magnitudes, and the masses, of all the bodies in the solar system may be ascertained. Thus, the *real facts* of astronomy, so widely and so amazingly different from the apparent ones, have been brought to light and made known by deductive reasoning. By the deductive method it is, then, that the heavens are spanned, and the distance from world to world is measured; that the mighty masses of the orbs above us are weighed as in a balance; and that, from the shining points we see, their stupendous magnitudes are marked out in space. Is 'experience our sole guide,' then? Is *all* our knowledge of nature 'from particulars to generals?' And is nothing ever ascertained by proceeding 'from generals to particulars?'

Not only the facts but the very laws of astronomy have been ascertained and established by the method of deduction. The three great laws of Kepler, by far the most splendid results of 'Formal Astronomy,' are due to this method. Though these laws are regarded by astronomers as the results of induction, yet this will be found, we think, to have been a rather negligent opinion, which has arisen, in part from a vague use of language, and in part from an inattention to the real nature of things. From the time of Aristotle down to the present day, the process of induction has invariably been described as that which proceeds from particulars to generals; while deduction has

been as uniformly defined, the act of reasoning from generals to particulars. In this sense of the words, the laws of Kepler were discovered by the deductive, and not by the inductive, method of inquiry. We think this position may be clearly and convincingly established.

The facts and phenomena with which Kepler dealt were, as every one knows, furnished by the observations of Tycho Brahe. But the question is, How did he deal with those facts and phenomena? Did he analyze them, observe their points of resemblance, and then, according to the method of induction, infer his general laws from the particulars before him? In one word, did he proceed from particulars to generals; either to general properties, or to general relations? We answer, he did not; there is nothing of the kind in any of the processes by which his beautiful conceptions were shown to be true, and firmly established. On the contrary, he summoned hypothesis after hypothesis to appear before him; and as each conjecture or guess thus arose, it was subjected to the test of mathematical calculation. Before this test, before this deductive investigation, each false hypothesis disappeared. It was inferred to be false, and rejected, because the conclusions to which it led, by rigorous deductive reasonings, were found not to correspond with the observed phenomena. In the establishment of one of his laws, not less than six hypotheses were thus tried and found wanting; and in the search after another, not less than nineteen false hypotheses experienced the same fate. And when the true hypothesis did appear, it was inferred to be true, only because the conclusions to which it led, by deductive reasoning, were found to form counterparts to the phenomena of nature. Precisely in the same way, as we have seen, are some of the truths of pure geometry established; having been assumed, in the first place, as new hypotheses, and then shown to be true, by the agreement of their conclusions, with what had before been shown to be true. The difference of the two cases consists not in the nature of the process itself, but only in the diverse nature of the objects to which it is applied; the results in the one case being compared with previously known, or demonstrated, truths, and those in the other being compared



with observed facts and phenomena. The process, we repeat, is precisely the same in both cases; and in both it is purely *deductive*.

If any one still insist that the magnificent laws of Kepler were discovered, or shown to be true, by induction, we shall have no quarrel with him about the use of terms. Only let the facts of the case be admitted, and we are satisfied. Granting, then, that those laws were made known by induction, it must nevertheless be admitted, that these very inductions were reared, and shown to be valid, by the application of the deductive method. The materials, if you please, may have been furnished by observation, or experience, or induction; but the fair fabric itself was reared by neither of these engines of science, nor by all of them combined. The deductive method is the great instrument by which this work was accomplished.<sup>13</sup>

So much for 'Formal Astronomy.' The consideration of 'Physical Astronomy,' or that which constitutes the crowning glory and beauty of the whole science, and which arms the human mind with so wonderful a power of prediction, next claims our attention.

Toward the conclusion of his admirable *Bridgewater Treatise*, Mr. Whewell has a good deal to say about the difference between *inductive* and *deductive* habits of mind, as well as about the diversity of character which results from the formation of such habits. Newton, of course, is held up as the great model of the inductive *discoverer*; while Laplace is referred to as the great type of the deductive *reasoner*. It has, indeed, become a sort of fashion among literary and scientific men to speak in this way about the great inductive discoverer, and the great deductive reasoner, as if they were not so much varieties of the same species, as the characteristic forms of different species. If, upon strict inquiry, it should turn out, then, that the process by which Newton made his great discovery, is precisely the same as that by which Laplace traced it to its consequences, we shall have some reason to suspect that the fashion in question is founded, not upon fact, but upon the commonly-

<sup>13</sup> Sir William Hamilton says, that the syllogism was never proposed by any one, not even by the schoolmen, as 'an engine of science.' What a confession of its inherent weakness!

received pre-conceived notion, that all discoveries are made by induction. If it should turn out that the only difference between the two cases is, that Newton, by reasoning from the hypothesis of his predecessors, was the first to bring its truth to light, while Laplace, by reasoning from the same hypothesis thus converted into a theory, brought out its truth into a still more conspicuous light, then shall we have some reason to suspect that the contrast between the methods of these two great philosophers owes its apparent solidity more to the effect of words than to the nature of things. In one word, if it should be made to appear, that Newton, by reasoning from one of the manifold unverified hypotheses of the past, was the first to disclose the real foundation of that hypothesis in nature, while Laplace, by a precisely similar method, contributed to strengthen its foundation, to extend its application, and to reveal its hidden glories, we shall have but little to say respecting this vast difference between the methods, and between the *intellectual* characters,<sup>14</sup> of the original discoverer and the mere deducer of consequences. For it will then be seen, that Newton was the original discoverer, not because his method was different from that of Laplace, but only because he was *the first to deduce consequences* which squared with the phenomena of the universe.

The science of physical astronomy, of which Newton laid the foundation, as well as reared the superstructure, is by far the most sublime monument of human genius the world has ever seen, or is ever likely to see. Yet indescribably grand and beautiful as this fabric is, there is not a single portion of it but has been determined and wrought into its place, by as pure and unmixed an effort of the deductive power as any to be found in the elements of geometry. In order to establish this position, we need only consult the facts recorded in the *History* of Mr. Whewell, and the *demonstrations* in the *Principia Mathematica* of Newton. In proceeding to do so, we shall take up the several steps of the wonderful discovery in question, in the precise order in which they were originally made, and consider the method by which each phase of the final grand

<sup>14</sup> We mean, of course, their intellectual characters as displayed in their astronomical investigations. There was, indeed, an immense difference between them in other respects.



result, or universal law, was successively brought to light, until the whole was perfectly disclosed, and the world, or rather the mighty system of worlds around us, was revealed to mortal vision, not as seen through the vague, misty metaphysics of the past, but through the transparent medium of the *Philosophiæ Naturalis Principia Mathematica*.

The law of universal gravitation, that 'every particle of matter in the universe attracts every other particle, with a force directly proportioned to its mass, and inversely to the square of its distance from the particle attracted,' was not reached at once, or *per saltum*, but by a succession of steps, or partial approximations. The first of these steps was independently taken about the same time by several philosophers and mathematicians, among whom were Wren, Hooke, and Halley, as well as by Newton himself. Setting out from the third law of Kepler, and assuming that the planets revolve *in circular orbits*, these philosophers drew the inference, that the attractive force of the sun, as exerted upon the planets, varies inversely as the squares of the distances. This law of the force, however, which was thus proved by mathematical deduction from the third law of Kepler, was first enounced by neither of the philosophers above mentioned. The honor of having first conjectured that such is the true law of nature, is due to Bouillaud.

The honor of having made the discovery of its truth, at least approximately, is due to Wren, to Hooke, and to Halley, as well as to Newton. But though Newton, like the others, first demonstrated the law in question on the supposition that the planets revolve in circular orbits, he did not rest satisfied with so imperfect an approximation, but afterwards adapted his reasoning to the true hypothesis, namely, that the planets revolve in elliptical orbits. In every instance, and by every person, the law of the force was shown to be true, if shown at all, by mathematical or deductive reasoning. The peculiar merit of Newton consisted, not in having taken this mathematical step, but in having executed it more perfectly than any other person; not in having first conceived the law, but in having more satisfactorily demonstrated its truth. In regard to this point, Mr.

Whewell says: 'The two steps requisite for this discovery were, to propose the motions of the planets as simply a mechanical problem, and to apply mathematical reasoning so as to solve this problem, with reference to Kepler's third law considered as a fact. The former step was a consequence of the mechanical discoveries of Galileo and his school. . . . The mathematical step required no small mathematical powers; as appears, when we consider that such was the first example of such a problem, and that the method of limits, under all its forms, was at this time at its infancy, or rather, at its birth. Accordingly, even this step, though much the easiest *in the path of deduction*, no one before Newton completely executed.'<sup>15</sup>

We have now seen, that the force of the sun's attraction varies, from planet to planet, in the inverse ratio of the square of the distance, and that the truth of this law was revealed by deductive reasoning, by the application of mathematical reasoning to the third law of Kepler. The object of the next step of the Newtonian discovery was to show that the force by which the sun holds a planet in its path varies, for every point of its course, according to the same law; that is, that the force decreases as the square of the distance increases. The first conception of the idea of this extension of the law of the great central force, forms no part of the glory of Sir Isaac Newton, by which he is so widely distinguished from all other men. This idea had, no doubt, been conceived, or this extension made, by many, and continued to haunt the imagination, where it could not be verified by the reason. It is certain that Hooke, in 1679, had asserted that, supposing such to be the law of the force, the orbit of the earth would be an ellipse. It has never appeared, however, that this was anything more than a conjecture with Hooke; but it was a conjecture which, according to Newton's own admissions, gave rise to his investigation on this point of the theory of universal gravitation. He was the first to *demonstrate*, by strict mathematical reasoning, that assuming the second law of Kepler, namely, that the orbit of a planet is an ellipse in one of whose foci the sun is placed, it necessarily follows that the central force of the sun varies inversely as the

<sup>15</sup> History of the Inductive Sciences. Vol. II. p. 162.

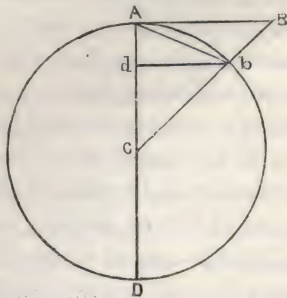


square of the distance. This demonstration constitutes one of the brightest rays in the glory of the *Principia*.

But the third step of the Newtonian discovery, if we consider the magnificence and beauty of its consequences, appears still more important than either of the preceding; we allude to the demonstrated connexion between the gravity of the earth and the orbital motion of the moon. Now this great step, this wonderful discovery, which was attended with such inconceivably magnificent results, was brought to light and firmly established by *deductive reasoning*. The steps of this reasoning may be easily indicated, and shown to be purely *deductive*. The calculations of Newton were, in the first place, based on the supposition that the orbit of the moon is a perfect circle, and consisted in the demonstration of the two following propositions: First, the moon falls toward the earth  $16\frac{1}{2}$  feet per minute; secondly, if the force of gravity, which causes a stone to fall to the earth, decreases as the square of the distance increases, it will be just sufficient to make the moon fall toward the earth  $16\frac{1}{2}$  feet per minute.

The first proposition, that the moon falls toward the earth  $16\frac{1}{2}$  feet per minute, is established by a purely geometrical demonstration, as follows: Knowing the length of the moon's orbit, and the number of minutes it takes the moon to pass over the distance, we find the length of the arc described by it, in one minute, by dividing the whole orbit by the number of minutes in a single revolution. Let us suppose, then, that the space which the moon thus describes in one minute is represented by the arc Ab. Now,

according to the first law of motion, if the moon were not drawn from its course by the central force at C, it would continue to move on in a right line, by virtue of the impulsive force which originally set it in motion; and at the end of one minute, instead of being



found at b, it would be situated at B. Hence, the space through

which the moon has fallen toward the earth in one minute, is represented by the line Bb. But since the arc Ab is an almost infinitesimal portion of the whole orbit of the moon, (though not so represented in the figure,) the line Bb may be considered as equal to Ad, and the arc Ab as equal to its chord Ab. This chord is easily found. By a theorem of geometry,  $AD:Ab::Ab:Ad$ , hence  $Ad = \frac{Ab^2}{AD}$ . But Ab, or the distance passed over by the moon in one minute, and AD, or the diameter of the moon's orbit, are both known quantities; therefore Ad may be easily calculated. This calculation gives about  $16\frac{1}{2}$  feet for Ad, or the space which the moon falls towards the earth in one minute.

Now, according to the second proposition, this is precisely the space through which the force of gravity would cause the moon to fall in one minute, supposing that force to decrease as the square of the distance increases. For, since the distance of the moon is 60 times the radius of the earth, the force of gravity at that distance would be 3,600 times less than at the surface of the earth; 3,600 being the square of 60. The moon, then, being acted on by this force, would fall  $\frac{1}{3600}$  part as far in one second as it would at the surface of the earth. But since the space passed through by a falling body increases as the square of the time, the moon would fall through 3,600 times this space in 60 seconds; or in one minute. That is to say, the moon would fall through the same space in one minute, that a body at the earth's surface would fall through in one second. But a body at the earth's surface, as observation shows, will fall through  $16\frac{1}{2}$  feet in one second; consequently the moon, being acted on by the same force, diminished according to the law in question, must fall through  $16\frac{1}{2}$  feet in one minute; *the very space through which it has been demonstrated to fall.*

Now mark the steps of this process. We first demonstrate, by means of geometry, that the moon falls  $16\frac{1}{2}$  feet in one minute; a new fact, or a fact before wholly unknown. We next show that, supposing the attractive force of the earth to extend to the moon, diminishing as the square of the distance increases, it will be just sufficient to cause that body to fall  $16\frac{1}{2}$  feet in one minute; the space it is actually shown to fall by



means of a demonstration. In the last place, we infer that such is the law of gravity, because the reasoning based on this law leads to a conclusion which a preceding demonstration has established. We infer the hypothesis to be true, because the conclusion to which it leads us agrees, not with a previously observed, but with a previously demonstrated, fact! Thus, the most sublime discovery ever recorded in the annals of science, was the result of as pure deductive reasoning as any to be found in the elements of geometry. In the application of this reasoning, it is true, reference is had to an observed fact, namely, the distance through which a body falls, at the earth's surface, in a second of time; but this reference affects, not the nature of the process itself, but only the object-matter to which it is applied. This simple fact being supplied by observation, the remainder of the process by which this magnificent extension of the law of gravity was made, is wholly mathematical; and without this remainder, it would be as impossible for the mind to rise into the region of such truths, as it would be for a bird to fly without wings.

The fourth step in the discoveries of Newton is the demonstration of the truth, that all the bodies of the solar system, including the satellites as well as their primaries, mutually attract each other with forces which vary directly as the quantities of matter, and inversely as the squares of the distances. That the force of gravity is thus mutual and universal, had been previously asserted by Hooke, Borelli, and others; and Kepler believed that the inequalities of the moon's motion are produced by the disturbing force of the sun's attraction. But the glory of proving these truths, which had merely haunted the imagination of others as plausible hypotheses, was reserved for the creator of physical astronomy. Assuming the law of gravity as a postulate, he proceeded to reason from this, and succeeded in deducing therefrom the inequalities of the moon's motion, by which he gave an additional strength and universality and beauty to his fundamental hypothesis. In this instance, as in every other, his theory was shown to be true, by the agreement between the mathematical consequences to which it led, by deductive reasoning, and the phenomena of nature.

The fifth and last step in the Newtonian discovery was likewise a purely deductive one. We have already seen,<sup>16</sup> that when he identified the gravity of the earth, by which a stone is made to fall, with the force that holds the moon in its orbit, he did much to confirm the pre-existing idea that the great universal force of nature obtains among the particles of matter; and that the attractive force of any mass is the resultant of the attractive force of all its particles. This doctrine had been distinctly taught by Galileo in regard to the earth, whose attractive force he asserted to result from the attractive forces of all its particles of matter, just as the strength of a cord results from that of all the individual threads of which it is composed. But this hypothesis, plausible as it was, still remained, like the others, to be verified and converted into a valid theory by the intellect of Newton. 'It does not appear at first sight,' says Mr. Whewell, 'that the law by which the force is related to the distance, will be the same for the particles as it is for the masses; and, in reality, it is not so, except in special cases. And, again, in the instance of any effect produced by the force of a body, how are we to know whether the force resides in the whole mass as a unit, or in the separate particles. We may reason, as Newton does,<sup>17</sup> that the rule which proves gravity to belong universally to the planets, proves it also to belong to their parts; but the mind will not be satisfied with this extension of the rule, except we can find decisive instances, and calculate the effects of both suppositions, under the appropriate conditions. Accordingly, Newton had to solve a new series of problems suggested by this inquiry; and this he did. These solutions are no less remarkable for the mathematical power which they exhibit, than the other parts of the *Principia*. The propositions, in which it is shown that the law of the inverse square for the particles gives the same law for spherical masses, have that kind of beauty which might well have justified their being published for their mathematical elegance alone, even if they had not applied to any real case.'<sup>18</sup>

<sup>16</sup> Southern Review for Jan., 1869, p. 180.

<sup>17</sup> Principia, Book III. Prop. 7.

<sup>18</sup> Hist. Induct. Sci., Vol. II. p. 184.



But, fortunately for the triumphs of the deductive method, and for the progress of human knowledge, those beautiful theorems are applicable to real cases, inasmuch as the mighty masses of the universe are very nearly of the spherical form.

We have now taken a brief survey of the five great steps in the discovery of Newton; and *of the methods by which they were severally taken; creating by far the greatest era of light ever known in the history of science.* But whence this magnificent illumination, and how kindled? We answer, by *deductive reasoning*; by demonstrative, mathematical evidence. Newton was *the* discoverer, not because his method was less deductive than Laplace's, but because he was the first to apply that method with success to the problems of the universe. Setting out from the great law as an hypothesis, he inferred its truth, because the consequences thence in all directions made to flow were the phenomena of the world. He was the great *inductive discoverer*, just because he was the great *deductive reasoner*. He brought the truth to light, converting an hypothesis into valid theory, because he was the first to deduce its real consequences; and Laplace, by simply tracing those consequences still further, strengthened the foundation which Newton had established. As the light of truth was originally struck out by the deductive process, so every additional ray thereof has been made to shine forth by the same method. 'Thus, then,' if we may borrow the words of Mr. Whewell, 'the theory of the universal mutual gravitation of all the particles of matter, according to the law of the inverse square of the distances, was conceived, *its consequences calculated, and its results shown to agree with phenomena.*' It was in this way that Newton made his discoveries; and it was in this way that Laplace confirmed them; the only difference being, that Newton reasoned from an hypothesis, and struck out the first light; while Laplace reasoned from the same hypothesis, or theory, and extended the dominion of that light. The one took his departure from the doubtful hypothesis of the past; the other, from the confirmed hypothesis of the present; both *deduced* its consequences, and both inferred its truth from an agreement of the consequences thus deduced with the phenom-

ena of nature. Their methods were one and the same; that is to say, they were both *deductive*. But the glory of Newton it is, (in regard to which he has neither had, nor can ever have, a rival,) that he was the first to grapple with the stupendous problem of the universe, and render its solution possible to man. It was his to hope when others had despaired, and to replace the magnificent dreams by the sublime demonstrations.

The really learned and beautiful history which Mr. Whewell has furnished of the foregoing facts, renders it the more wonderful that, after all, he should have come to the conclusion that 'no new truth' is ever arrived at by deductive reasoning; especially as his *History* was written with a view to the *Philosophy of the Inductive Sciences*. The process by which he was conducted to this conclusion was probably as follows: 'Deductive reasoning is virtually a collection of syllogisms';<sup>19</sup> and as 'all who, in modern times, have attained to the science of logic,' admit that syllogistic reasoning 'produces no new truths,'<sup>20</sup> it follows that all new truths are discovered by induction. Or it may have been thus: Since it is conceded by logicians that all new truths are discovered by induction, it follows that none are brought to view by deduction. But whatever may have been the process by which the conclusion was formed, it is certain that in its adoption the author wandered from the lights of his own *History*. For he there tells us that the theory of universal gravitation, as developed by Newton, 'took up all the facts of astronomy as far as they had hitherto been ascertained; while it pointed out an interminable vista of new facts, too minute or too complex for observation alone to disentangle, but capable of being detected when theory had pointed out their laws, and of being used as criteria or confirmations of the truth of the doctrine.'<sup>21</sup> Nay, even in his *Philosophy*, he has elsewhere so far lost sight of the authority of logicians, as to declare the plain truth on the very subject under consideration. With reference to the theory of gravity, he says 'the deduction establishes the induction.' And again, 'the principle we gather from the facts is true, because the facts can be derived from

<sup>19</sup> Phil. Ind. Sci., Vol. II. p. 91.

<sup>20</sup> Ibid. Vol. I. p. 70.

<sup>21</sup> His. Ind. Sci., Vol. II. p. 185.



*it by rigorous demonstration.*' 'Deduction,' he continues, 'justifies by calculation what induction had happily guessed. Induction recognizes the ore of truth by its weight; deduction confirms the recognition by chemical analysis. Every step of induction must be confirmed by rigorous *deductive reasoning*, followed into such detail as the nature and complexity of the relations (whether of quantity or any other) render requisite. If not so justified by the supposed discoverer, it is *not* Induction.'<sup>22</sup> The truth could not have been more happily expressed. The great discoveries of science are, after all, only guessed at, not made, by induction; and if 'the supposed discoverer' rests upon induction merely, he must be content to remain in the dim region of conjecture. He can never reach the region of science, or convert his supposed inductions into real ones, until they be confirmed and justified 'by rigorous *deductive reasoning*.' Now, we do not say this is always the case. The author seems here to give too great and too exclusive a dominion to the power of deductive reasoning; inasmuch as there appear to be truths, not only guessed at, but firmly and immoveably established, by induction alone, or by proceeding from particulars to generals, without the aid of the reverse process. But it certainly includes all for which we contend, namely, that the most sublime discoveries ever made in the physical sciences, were guesses or conjectures, until their truth was brought to view by deductive reasoning; in short, that they existed not as valid inductions, or real discoveries, until they had been subjected to the transforming power of the deductive method. And this being so pre-eminently the case in regard to the discoveries of physical astronomy, the era which they have rendered forever illustrious in the annals of science should have been called by its historian, *The Deductive*, rather than 'The Inductive Epoch of Newton.' For the inductive epoch of *guessing* had then passed, and that of *demonstration* had arrived.

In further confirmation of our views, if further were needed, we should be glad to ornament our discourse with the comparatively minute, but yet very striking and beautiful, illustrations

<sup>22</sup> Philosophy Ind. Sci., Vol. II. pp. 92-3.

adduced by Sir J. Herschel, in order to show how far, in the path of discovery, deductive reasoning frequently outruns experience, and leaps to the unknown phenomena and laws of nature. But since our limits will not permit this, we shall confine our attention to the two magnificent results by which this wonderful power of prediction belonging to true science is illustrated. We do not here allude to the prediction of an eclipse, or the return of a comet, but to those sublime anticipations by which the names of Lagrange, of Leverrier, or of Adams, have been rendered immortal.

It is a truth that was certainly unknown, (that is, if we may suppose any thing to be unknown which can be inferred from known premisses,) that the system of worlds in which we live would, for all ages, maintain its stability, without the direct miraculous interference and agency of its great Author and Preserver. This was a truth unknown to Newton himself, who, with the best means of judging, came to the conclusion that the solar system would finally run down, or suffer a collapse, unless the equipoise of its mighty masses should be restored by the arm of the Almighty, and the natural effect of its laws be thereby prevented. But the improved analysis of modern times, and the more accurate results of its deductive processes have reversed this opinion of Newton, and vindicated the glory of the far-seeing wisdom by which the frame and structure and laws of the universe were planned. Armed with the calculus, as with a time-penetrating telescope, the eye of Lagrange looked through the dim vista of the eternal ages, and saw that the mighty system of worlds around us would roll on forever; having within its own bosom the indestructible, self-regulating power by which its everlasting stability is secured. Was not this the discovery of a new truth? Was not this to outrun experience, and leave induction behind? Was not this to tell us something, respecting the order of the universe, which we had not known before? Most assuredly it was; unless we may be allowed to contend that it was all known before, and especially to Newton, because it was inferred from the premisses which he had established.

The discovery of a new world by Leverrier, was made, ex-



clusively, by deductive reasoning. The first suggestion of the existence of such a world somewhere in space, had occurred to many others as well as to himself; this suggestion in every case being the result of a very simple deduction. The relation between the perturbations of a planet, as an effect, and the action of an existing world, as its cause, is one of the fundamental axioms belonging to the Newtonian system of the universe. But, in the case of Uranus, perturbations were observed, which could not be explained by the disturbing influence of the worlds then known to exist. Hence, by virtue of the axiom in question, many had inferred the existence of some hitherto unknown world, by which the unexplained residual phenomena observed in the motions of Uranus were produced. To draw the inference in this general way was no very difficult matter. The idea, however, of setting out from the observed anomalous deviations, and employing them as data to ascertain the distance and situation of the unknown body, or, in other words, to resolve the inverse problem of perturbations, '*Given the disturbances, to find the orbit, and place in that orbit, of the disturbing planet,*' appears to have occurred only to two mathematicians, Mr. Adams in England, and M. Leverrier in France, with sufficient distinctness and hopefulness of success to induce them to attempt its solution. Both succeeded, and the solutions, arrived at with perfect independence, and by each in entire ignorance of the other's attempt, were found to agree, in a surprising manner when the nature and difficulty of the problem is considered; the calculations of M. Leverrier assigning for the heliocentric longitude of the disturbing planet for the 23d September, 1846,  $326^{\circ} 0'$ , and those of Mr. Adams, (brought to the same date,)  $329^{\circ} 19'$ , differing only  $3^{\circ} 19'$ ; the plane of its orbit deviating very slightly, if at all, from that of the ecliptic.

'On the day above mentioned, a day forever memorable in the annals of astronomy, Dr. Galle, one of the astronomers of the Royal Observatory at Berlin, received a letter from M. Leverrier, announcing to him the result he had arrived at, and requesting him to look for the disturbing planet in or near the

place assigned by his calculations. He did so, and *on that very night actually found it.*'<sup>23</sup>

'Subsequent observations and calculations,' continues Sir John Herschel, 'have fully demonstrated this planet, to which the name of Neptune has been assigned, to be really that body to whose disturbing attraction, according to the Newtonian law of gravity, the observed anomalies in the motions of Uranus are owing.' Connected with this discovery is another, made by Prof. Walker, who ascertained (by mathematical calculations of course) that the planet thus discovered was observed as a star by Lalande in 1795; and, availing himself of the observations made by Lalande, as well as those since accumulated, he *calculated* the elements of Neptune's orbit, and forever determined its path in the heavens.

ART. III.—1. *A Memoir of the Rev. John Keble, M. A., Late Vicar of Hursley.* By the Right Hon. Sir J. T. Coleridge, D. C. L. Oxford and London: James Parker & Co. 1869.

2. *The Birth-place, Home, Churches and other Places connected with the Author of 'The Christian Year.'* Illustrated in thirty-two Photographs. By W. Savage: With Memoir and Notes by the Rev. J. F. Moor, Jr., M. A. Second Edition. London: James Parker & Co. 1867.

Φίλος ὃ ἦν ἀνθρώποις  
Πάντας γὰρ φιλέσκειν, ὁδῶ ἔπει οἰκία ναίων.

*Iliad*, Z. 14, 15.

We have read Coleridge's Memoir of Keble with great satisfaction. Although necessarily incomplete in some respects, yet, regarded as a mere specimen of biography, it deserves a place

<sup>23</sup> Outlines of Astronomy—Sir J. Herschel.



among the best works which in that department our literature can boast. We can name no book which shows more fairness, honesty, and loving kindness. It is written by a life-long friend of the poet, and throughout its pages the author keeps steadily in view his main purpose—a truthful portraiture of the man. The style is clear and straight-forward, and at times rises to a subdued eloquence worthy of him who is its subject. Of the controversial questions which came up during the life of the late Mr. Keble, and of the men still living who shared with him the heat of those polemical contests in which he bore a leading part, the author has written in an honorable and candid spirit. It was impossible to avoid those issues, which in great part made up the poet's life; and yet we feel sure that no frank, generous reader but will thank Sir John, for the manly way in which he has treated both the living and the dead. We have remarked, that this life of Keble must of necessity be incomplete, and in part unsatisfactory. This fault, however, rests not with the biographer—but in the recentness of Keble's death, with the fact that two most closely joined with him are still living, and that of them little could be said with propriety. It is scarcely possible for so eminent a jurist as Sir John Coleridge to write as large a book as the one now before us, without giving us much information, new to readers on this side of the water, of the men and events which make the history of the English Church for the last forty years.

Before we enter upon the life of Keble, it appears necessary to go back to a period beyond that in which he bore so large a part, and take a view of Oxford, and, we might add, of the English Church of the eighteenth century. The University Annals of that century, and especially of the earlier part of it, are meagre beyond words. Oxford had not then wholly recovered from the intellectual stagnation into which Jacobitism had drawn the English mind. A few names here and there redeem those classic shades from utter sluggishness, but they chiefly belong to the close of the century. Dr. Humphrey Hody, of Wadham College, a deep and careful scholar, gave from the quiet of his studious days, works which are now all but forgotten. Dr. Robert Lowth, successively Bishop of St.

David's, Oxford, and London, still holds his place among the learned divines of the Church. His versatile mind made for itself paths in various fields of scholarly activity, and his *Preflections* on Hebrew Poetry find admiring readers in our own day. Dr. Thomas Warton, of Trinity College, Professor of Poetry, and afterwards Camden Professor of History, was a man of rare gifts and 'laborious days.' Although a poet of no very great pretensions, he was a very worthy successor of Whitehead in the poet-laureateship. Even to this time, his *History of English Poetry*, may be regarded as the standard work in that department of literature. To those familiar with its pages, we need not recall the erudition, varied and curious, with which it abounds. The University pulpits, too, were influenced by the same Jacobitical spirit, which in some quarters is yet far from effete. Many on the other side of the Atlantic will recall a sermon on the *Study of the Greek Language*, in which the preacher asserts that the evidences of the truth of Christianity would be very unsatisfactory, but that the 'adversative force of the particle  $\alpha\lambda\lambda\acute{\alpha}$  had been happily balanced by the intensitive of the particle  $\gamma\acute{\epsilon}$ .' How strangely such teaching contrasts with the beautiful sermon of the late Isaac Williams, on the *Study of the Classics*, which introduces his *Christian Scholar!* But a far deeper and more potent evil, perhaps the result of such University influences, spread itself over English clerical life. Worldliness, and a low estimate of Holy Orders so warped and crippled the Anglican Communion, that her clergy, as a rule, were but fair specimens of the country gentlemen of that period known as 'the good old days of George the Third.' The sacred seasons of the Christian Year were little observed, frequent services were scarcely known, and church buildings were regarded with but little more veneration than the parks and manors of the rich and titled. It was not uncommon for the good and easy-going parson or vicar to have his horse and hounds awaiting him at the church's door, that he might, without delay, mount and away to the chase, when the Services were said. The Church of England had fallen so low that the life and condition of her clergy gave



double poignancy to the saying of two centuries ago, *Clerus Anglicanus stupor mundi*.

Such was in general the character of University life at Oxford, and of the English clergy, when the old moorings began to give signs of weakness, and finally of dissolution. A new school of thought was forming, and a different class of men were laying deep foundations for future activity, but in divergent paths. The hour of conflict with the then existing state of things was fast approaching, and the University proverb, '*Cum pugnant Oxonienses, volat ira per Angligenenses*,' was replete with a significancy scarcely known before. The cloistral walks, the lawns and gardens inviting to luxurious ease, the pannelled college-halls, on whose walls were the portraits of men once cherished as loyal sons of a benign mother, the verdant quadrangles, where kindred spirits in ages long gone by communed together, or the chapels, through whose richly tinted windows the rising and setting sun cast his beams on those who knelt in the solemn prayers of a glorious liturgy,—all these were the scenes of earnest activity and new found life. Oriel by her liberal foundation gathered to herself the busy, leading intellects of Oxford. The fellowships of other colleges being close, and those of Oriel open alike to all, while, at the same time, in the examination for fellowships, no reference was had to former University distinctions, but the candidate was put to a rigid test, classical and mathematical, of his acquirements. All these considerations gave her a reputation and character unequalled by any other College. So honorable was a fellowship at Oriel in those days, that the late Lord Grenville called it 'the Blue Ribbon of the University.' And well he might, for it then nurtured children whose influence of person and voice and pen was to shape, to a greater or less extent, the opinions and faith not only of members of the English Church, but of unborn sons of her dutiful daughter in the wilds and rude villages of America. In short, wherever the English tongue was heard, whether in her own colonial possessions or amid the back-forests of our own land, the power of that little society was destined to be *felt*.

'The memories of that peaceful place  
Fill up their after life,  
The prayers and quiet ways of grace.  
And yet more holy strife.'<sup>1</sup>

On the list of 'Orielenes' at that date were the names, now known almost in every quarter of the globe: E. Coplestone, J. Davison, E. Hawkins, J. Keble, T. Arnold, R. Whately, E. B. Pusey, H. Froude, G. A. Denison, S. Wilberforce, R. J. Wilberforce, and J. H. Newman. Did ever such a coterie of intellect and genius gather together in any college? The first two, while tutors of Oriel, burnished their weapons for a skirmish with the *Edinburgh Review*; and later, Davison's work on *Sacrifice and Atonement* burst like a Hotchkiss shell in the enemy's camp. The contest ran high, and amid the noise and tumult of this intellectual battle-field, another and a quieter power was sending forth an influence, which gathered around its mover the earnest, studious, and gifted young men of Oxford. That power was lodged in the most remarkable man of a most remarkable age—John Henry Newman.

In the early days of that movement, which agitated the Anglican Church in its every fibre, a stranger visiting Oxford would have been at a loss to determine the secret of the marvellous influence which this wonderful man wielded. Keble was known and loved by all. His *Christian Year* was in every body's hands, and awoke by its plaintive beauty the deepest veneration for its author. Dr. Pusey's wonderful learning and broad spirituality were acknowledged everywhere. Yet, at the date of which we write, Newman far surpassed them as the recognized leader of the times. Many reasons might be assigned for Newman's foremost place in power, and certain it is that 'he ever shrank from being a leader; and especially he wished not to encourage young men, upon his own authority, to go to the verge of what the Church of England did not condemn, although she did not sanction it.'<sup>2</sup> That singularly fascinating book, the *Apologia*, gives us a clue by which we can trace the quiet but potent sway which he exercised over

<sup>1</sup> Christian Scholar.

<sup>2</sup> Dr. Pusey's Historical Preface to Tract 90, p. 9.



others. When an undergraduate, Newman was walking one day in High street, with John Bowden, and he tells us that this earliest friend with eagerness cried out—‘There’s Keble!’ and he adds: ‘With what awe did I look at him!’ But a few years pass and the observer becomes the observed. Bishops, priests, and laymen, from far distant shores, eagerly strain their eyes, when perhaps an undergraduate is heard to cry out—‘There’s Newman!’ The awe with which he gazed after Keble, who was to be, as it were, his elder brother, was almost identical with that with which *he* was followed. How then, we may ask, came Newman at that time to equal and in a measure surpass both Keble and Pusey in extent of influence? Let us endeavor to solve this enigma. There was always an air of mystery about Newman. It awakened in many a deep and peculiar veneration rather than admiration. His mind dwelt apart from the scenes of what we understand by the phrase, this workday world, and lifted itself into speculative regions, often far beyond the ken of enraptured followers. Men felt, and knew, that the awful questions which deal with the longings of our immortal being were the constant themes of his solitary study and meditation; that his vision carried him beyond the things that are temporal; that his whole being sought to grasp the things that are eternal. He lived, as it were, in mid-air—far out of reach of men of less spiritual or less gifted natures. Such a character, other things being equal, could not fail to create in all within the scope of such fascinating power, the most intense affection and devotion. Then, too, Newman’s nature, as is easily discernible even to the cursory reader of the *Apologia*, was deeply ardent and loving. We might point to passages in that work which cost the writer bitter tears. A dear friend once remarked to us that he could almost see the keen sorrow of Newman’s face as he wrote those lines—‘I have never seen Oxford since, excepting its spires, as they are seen from the railway.’ For the undergraduates who were admitted into such a sphere of love as he could make, he cherished a devotion rarely bestowed on man’s nature. His was the delicate tenderness of woman. We speak it reverently when we say that Newman’s prototype in this

respect is found in the Beloved Disciple, St. John. This in part reveals the secret of his attractiveness for young men of refinement and culture, and the influence he exerted over them. This, again, in conjunction with his matchless power as a preacher, solves to some degree the question we proposed.

We have hitherto touched almost exclusively on Newman's warmth of nature, by which he drew men to him. How shall we delineate him in the pulpit, in which lay his greatest strength? Or in what language shall we recall the *Church of St. Mary, the Virgin*, once known to the ends of the civilised world and forever connected with Newman's great name?

'Without—the world's unceasing noises rise,  
Turmoil, disquietude, and busy fears;  
Within—there are the sound of other years,  
Thoughts full of prayer, and solemn harmonies.'<sup>3</sup>

It is a bright sunshiny Sunday afternoon. The time in all the year when nature shadows forth lessons of the resurrection of the dead. It is Easter-tide; the Feast of feasts has just gone, but has left to us

'An Easter Day in every week.'<sup>4</sup>

We join, to borrow a phrase of Petrarch's, the '*magnanimi pochi*,' who wend their way to St. Mary's. The undergraduates are the flower of Oxford—the reading men, with high aspirations, and an earnest teachableness of disposition. To us, as strangers, the Gothic outlines of that famous Church are new. We are to hear for the first time its vicar, whose name in our home beyond the seas is a household word. The Church, as is usual, is, perhaps, but half full—'fit audience, though few.' The service does not strike us as at all remarkable. A reverence and holy calm pervade its rendering, while the soft, sweet voice of the vicar, clear as a silver bell, impresses us with minor beauties in the appointed lessons, which, it may be, we never caught before. We anxiously await the sermon, which seems the great attraction to those who are not regular attendants upon the service. No one who looks closely into the eager, earnest face of the preacher, can forget the depths of spiritual

<sup>3</sup> The Cathedral.

<sup>4</sup> Keble—Christian Year.



life, that soften and tone down the little of earthliness, which, indeed, but enlivens the humanity of the countenance. There is something peculiar in the vicar's delivery, but in a little while it lends to it a charm. It is just what we expected. No ornate periods, polished to the last point of rhetorical finish, are heard. No abstruse reasoning about the real objective Presence of our Lord in the Eucharist. Nothing very distinctively Anglican in thought or opinion. Rather, all the great catholic truths of an undivided Church underlie the beautiful and simple teaching which, from year to year, is given from the pulpit of St. Mary's. No self-pleasing, even in its most refined forms, is apparent in the preacher, but, on the contrary, a deadness to all purely earthly things pervades the entire sermon. The mere unrealities of this life and its passing events but quicken into spiritual being in the soul of the hearer whatever of heavenly yearning is hidden there. And sermon after sermon, as the ecclesiastical cycle goes on, draws us more and more within the veil; while the visible life in the world takes its value only in the wonderful light and irradiation which the life of Christ, as unfolded in the Church's round of Holy Commemorations, affords. The realities of faith, the inward being, the certainties of the unseen world, form the burden of his teaching. Many a parish priest, doing his work in rural cures, crowded cities, or colonial towns, of England, remembers when Newman spoke to him when an undergraduate as an inspired prophet of *The Church a Home for the Lonely, Warfare the Condition of Victory*, or, *The Cross of Christ the Measure of the World*. Since then, too, those wonderful *Parochial Sermons* have been read and studied in every quarter of the globe. In them, the weary and sorrow-laden of many lands, who have never looked into Newman's face, have found much to soothe anxious hearts; and models they will ever be of the most perfect English style.

Before we pass on to notice a few of those early friends of Keble now gone to their rest, let us recall two occasions near to the end of Newman's career at the University as a public teacher. The loving friends who had shared in the conflict, and in the distrust, too, with which he was visited, saw that the

time was short, and that soon he would be lost to the Mother in whose bosom he had been nurtured all the days of his life. To none was the blow severer than to Keble. 'This was the sorrow of his life,' says Sir John Coleridge, 'from which I think he never wholly recovered.'<sup>5</sup> As we look back through the vista of twenty-six years, these two occasions referred to gather around them a sadness and a pathos, like the tender lament of an Israelitish captive by the waters of Babylon.

In the winter of 1843, Dr. Newman appeared as a University preacher for the last time. He was fresh from the study of his *Theory of Development of Christian Doctrine*, and this was the theme of which he discoursed in crowded St. Mary's on that last Sunday. The silvery voice, whose utterances about music were clothed in clearest Saxon, still lingers in many a memory. Who that heard it, can forget the close of that remarkable passage?—

'Can it be that those mysterious stirrings of heart and keen emotions, and strange yearnings after we know not what, and awful impressions from we know not whence, should be wrought in us by what is unsubstantial, and comes and goes and begins and ends in itself? It is not so; it cannot be. No; they have escaped from some higher sphere; they are the outpourings of eternal harmony in the medium of created sound; they are echoes from our Home; they are the voices of angels, or the *Magnificat* of Saints, or the living laws of Divine governance, or the Divine attributes; something are they besides themselves, which we cannot compass, which we cannot utter, though mortal man, and he perhaps not otherwise distinguished above his fellows, has the power of eliciting them.'

Just two years before his submission to the Roman Communion, Dr. Newman preached his last sermon as a Priest of the Church in which he was born. It was in the long vacation succeeding the winter of 1843. How painfully vivid in the memory of many is that date! Few, beyond the rural population of Littlemore, heard his parting words, so very full of sadness. 'Man goeth forth to his work and his labour until evening,' was the text of that sermon in which he spoke of the *Parting of Friends*. Its wail went up like to that lamentation of David over Saul and Jonathan. He gave up his fellowship and retired into lay communion to the quiet seclusion of Littlemore. The sad, deep undertone of that beautiful sermon har-

<sup>5</sup> Sir J. Coleridge's Memoir of Keble, p. 280.



monized well with the sorrowful feelings of tender-hearted friends and the anxieties of the times. It was a prose Elegy for all that from early youth had made life dear to him, only less dear to his mind than truth itself. It is difficult to refrain from quoting many passages of it, but we must, with a single short selection, refer the reader to the sermon itself. Thus ran the closing words :

'O my brethren, O kind and affectionate hearts, O loving friends, should you know any one whose lot it has been, by writing or by word of mouth, in some degree to help you thus to act; if he has ever told you what you knew about yourselves, or what you did not know; has read to you your wants and feelings, and comforted you by the very reading; has made you feel that there was a higher life than this daily one, and a brighter world than that you see; or encouraged you, or sobered you, or opened a way to the inquiring, or soothed the perplexed; if what he has said or done has ever made you take interest in him and feel well-inclined towards him, remember such a one in time to come, though you hear him not, and pray for him, that in all things he may know God's will, and at all times he may be ready to fulfil it.'

To use his own language, Newman was on his death-bed, as regards membership with the Anglican Church. In October, 1845, he was received into the Church of Rome. The event was foreseen; yet when it took place, it threw consternation into many a heart, and for a time crippled the movement of which, says Newman, Keble was 'the true and primary author.' We cannot now retrace such events, connected so intimately with Keble and the Oxford movement, as it is called, without feeling that something is due to other great names alike contemporaries of the author of the *Christian Year*. But few of that generation remain who took active part in the polemics of the period. Froude and Bowden were called away before the Tractarian school took definite form, and Wilberforce and Williams, since Newman's reception into the Roman Church.

'The living and the dead

Blend in our dreams together. For in truth  
Man's spirit knows not death, but sets aside  
The interlinear boundaries of the flesh,  
And in its thoughts, which are its proper self,  
Holds intercourse with those which are unseen  
As if they were still with us.'<sup>6</sup>

<sup>6</sup> The Christian Seasons.

To mention Richard Hurrell Froude's name, is to call up the beautiful picture of the man embalmed in amber, on the pages of the *Apologia*. He was Keble's beloved pupil,

‘Known the earliest, and esteemed the most.’<sup>7</sup>

When Keble accepted the curacy of Southrop, Robert Wilberforce, Isaac Williams, and Hurrell Froude, paid long visits both as pupils and as friends. Sir John Coleridge has given us farther particulars of Froude and his ancestors, which heighten our admiration for his character. Keble visited the family in Dartington parsonage, and described Hurrell's father thus to his biographer: ‘Very amiable, but provokingly intelligent, one quite uncomfortable to think of, making one ashamed of going gawking, as one is wont to do, about the world, without understanding anything one sees.’ His mother was a woman of rare beauty and intelligence, and of delicate health. Like the father, Hurrell ‘was clever, knowing, quick, and handy; like the mother, he was sensitive, intellectual, imaginative.’ He died February 29th, 1836, before his theological views had attained an expressed and definite shape. His *Remains* were edited by Keble and Newman, the latter writing the preface. His death was a sad loss to his dearly loved teacher and friend. The love that existed between them was romantically tender and delicate, each knew the other so profoundly. Keble's devotion for Froude never lessened, but welled up in sacred memories till his latest day. The biographer justly writes of this pure, accomplished, early friend both of himself and of Keble: ‘What he would have been, and what he would have done, had his life been prolonged, no one can say; it would be unfair to judge him by what he left behind, except as rich grounds of promise. This I believe I may confidently say, that those who knew him best loved him the most dearly, and expected the most from him. This could be more truly said of no one of these than of Keble.’<sup>8</sup>

John William Bowden died only a short time before Dr. Newman joined the Roman Communion. ‘With my great

<sup>7</sup> Childe Harold.

<sup>8</sup> Coleridge's Memoir, p. 113.



friend,' writes the latter of him, 'I passed almost exclusively my undergraduate years.' Bowden, alike with Froude, contributed some verses to the *British Magazine*, which were afterwards collected by Dr. Newman in the volume known as the *Lyra Apostolica*, and of which we will speak hereafter. He also, at Froude's suggestion, made through Dr. Newman, gave to our historical literature a very valuable *Life of Pope Gregory the Seventh*. His two sons entered the Roman Communion and are now Priests in the London Oratory.

Robert Isaac Wilberforce, brother of the present Bishop of Oxford, was the second son of William Wilberforce. He was elected to a fellowship in Oriel on the same day with Froude. For a time he held a country cure, and afterwards became an Archdeacon. In connexion with the Bishop of Oxford he published, in 1838, a Life of their father. He was a man of deep scholarship and purity of character. He published a series of sermons on the *New Birth of Man's Nature*, and a work on the *Doctrine of Holy Baptism*; also a work on the *Holy Eucharist*, which occasioned some controversy at the time. He left the English Church and joined that of Rome in 1854. His reasons for forsaking the Church of his fathers, he gave to the world in a work entitled, *The Royal Supremacy*. All his works have been republished in America. He died in 1857, while making preparation at Rome for the priesthood. In a letter written on the 18th of September, 1854, from Vineyard, the residence of the Champernownes, to his curate, Mr. Wilson, Keble says: 'Poor dear R. W., I own I was surprised at last; for the last report I had heard was an improved one, and I had heard nothing for a long time. . . . I wish I could compose and write on it; it would be a sort of relief. In theory, I think, his position of Lay Communion is tenable, at least, I wish to think so; for, at the rate men are getting on, no one can say how soon he may himself be reduced to it. But I do not in the least expect that R. W. will have patience for it. I hear he is very miserable; from himself I have only had one short and kind note.'<sup>9</sup>

Keble writes to Coleridge on the 6th of November following,

<sup>9</sup> Coleridge's Memoir, p. 401.

from Hursley, saying that Wilberforce's 'departure touches me almost more nearly than any one's; except, perhaps, that of Newman himself. I did not, until very lately, think that he would really go *there*.' . . . 'But he had got into an Utopian dream, and rather than give it up, he shut his eyes and made a jump, and now he must, and I suppose will, keep his eyes shut all his life long.'<sup>10</sup>

Last, in point of time, stands the well-known name of Isaac Williams. He was a fellow of Trinity College, Oxford, which was Newman's first college. It was of Trinity that Dr. Newman said that 'there used to be much snap-dragon growing on the walls opposite my freshman's rooms there, and I had for years taken it as the emblem of my own perpetual residence, even unto death, in my University.' He was an early friend of Newman's, and in 1840 *The Church of the Fathers* was dedicated 'to my dear and much-admired Isaac Williams, B. D., the sight of whom carries back his friends to ancient, holy, and happy times.' Seventeen years later, in a new edition of that work, appeared the present dedication: 'To a Friend, who is as dear to me now, as when his name stood here, and threw light over my pages; whose heart is in God's hand, to bring into that sacred heritage, which is both the Church of the Fathers and the Home of the Children.' The fourth edition of this beautiful volume came out in 1868. Williams died in 1865. He, like Dr. Pusey and Keble, remained faithful to the English Church. The warm friendship between him and Dr. Newman, dating its birth back to the days when they were together at Trinity, never grew cold. Only a few days before he was gathered to his rest, Dr. Newman visited him in his retirement. Isaac Williams is the author of many works of a devotional character on the Gospels; he has also written several volumes of poetry, which alone would give him a place by the side of Herbert, Heber, and Keble. The author of the *Christian Year* in the conclusion of a letter written to Coleridge on the 5th of June, 1865, says: 'I am reading up some of dear Isaac Williams's works, which to my shame I had neglected, and I find them *so* beautiful.' In 1841, when Keble

<sup>10</sup> Coleridge's Memoir, p. 403.



vacated the Poetry Professorship, he urged the name of Isaac Williams as his successor; but party spirit then ran too high, and in consequence of that alone, he was defeated. The *Christian Scholar*, the *Cathedral*, the *Baptistery*, and *Thoughts in Past Years*, have opened avenues of delight to many. We think of him, too, with affection, because, when hearts were failing, he carried on to the end of his life the great work of quieting uneasy spirits by means of soothing verse, and because his unabated love for the Church of the Fathers pointed, to use his own words, to

‘A path of peace amid the tangled grove,  
A moon-lit way of sweet security —  
Bright holydays that form a galaxy  
To make a road to Heaven.’<sup>11</sup>

We have now finished our short memorial of men early and closely connected with the great movement of the present century in the Church of England. Of one great name, we have purposely said nothing, not that we think him less worthy of notice than others of the group of men of whom we have written, but because he still lives to calm the excitements of the present issues of the Anglican Church, and to guide the unstable by his wise counsels. He stands to-day as the connecting link, which holds together a school of men now passed away, with the energy and devotion of a new generation, who are carrying on the work which the former began. Dr. Newman ‘used to call him *ὁ μέγας*.’ We need hardly write the name of Dr. Pusey. Perhaps no man of this century, now living, has so penetrated by his writings the universal heart of the English Church. Among the inquiries of a Churchman visiting Oxford, the first is usually made about Dr. Pusey. The late Charles Robert Leslie, R. A., has given in his Autobiography an amusing paragraph, which relates to the subject, and for that reason only we transcribe it: ‘While looking at the collection of pictures, not remarkable for their excellence, belonging to Christ Church College, a gentleman in a gown and cap, accompanied by two ladies, passed through the gal-

<sup>11</sup> The Cathedral.

lery. "That is Dr. Pusey," whispered our guide. "He has gone up into the library: you can go up." This, however, we did not choose to do, immediately; but, after looking at all the pictures, in the vain hope of finding something good, we ascended to the library, where the Doctor was writing at a window in the centre of the room. "He will turn round directly, and then you will see his face," said our guide. This happened accordingly; and when the Doctor left the room we were shown his autograph, in the book in which volumes borrowed are entered. It seemed, indeed, as if we had come on a pilgrimage to Oxford, *as the residence of Dr. Pusey*; for another of the guides asked if we wished to see the house in which he lived, and was astonished to find we did not care to go out of our way for it.<sup>12</sup>

We have said that Dr. Newman regarded John Keble as the author of the religious movement afterwards known as Tractarian. And here, although it may be familiar to many, we must reproduce the picture which Newman has so skilfully limned of the friend to whom he owed so much. Speaking of Keble, he writes: 'Having carried off as a mere boy the highest honors of the University, he turned from the admiration which haunted his steps, and sought for a better and holier satisfaction in pastoral work in the country. . . . . The first time that I was in a room with him was on occasion of my election to a fellowship at Oriel, when I was sent for into the Tower, to shake hands with the Provost and Fellows. . . . . I bore it till Keble took my hand, and then I felt so abashed and unworthy of the honor done me, that I seemed desirous of quite sinking into the ground . . . . . I heard a Master of Arts of my College give an account how he had just then had occasion to introduce himself on some business to Keble, and how gentle, courteous, and unaffected Keble had been, so as almost to put him out of countenance. Then, too, it was reported, truly or falsely, how a rising man of brilliant reputation, the present Dean of St. Paul's, Dr. Milman, admired and loved him, adding, that somehow he was unlike any one else. However, at the time when I was elected Fellow of Oriel, he was not in

<sup>12</sup> Autobiographical Recollections, p. 128.



residence, and he was shy of me for years in consequence of the marks which I bore upon me of the Evangelical and liberal schools. At least so I have ever thought. Hurrell Froude brought us together about 1828: it was one of the sayings preserved in his *Remains*—Do you know the story of the murderer who had done one good thing in his life? Well; if I was ever asked what good deed I had ever done, I should say that I had brought Keble and Newman to understand each other.'

It was just one year before Keble and Newman came to know each other, that the *Christian Year* was published. Of it we will speak in another place. Controversy at best is dry, tedious work. To Keble's natural tastes and habits of mind, it is not difficult to imagine how uncongenial it was, and only a deep sense of responsibility and watchful love for the English Church could call him forth into the arena of polemics. His share in the great revolution, which was evidently at hand, lay in a different direction. No upheaving in politics, theology, or society, but enlists the muses. The influence which the poet exerts is deeper, broader, and more enduring than speeches, sermons, or treatises on social questions.

Keble was the poet of the movement. He was to lead up the aspirations of kindred spirits to a higher and more peaceful table-land, from which the vague cravings after something better might in part be satisfied by the vision of the glories still to be the heritage of the Church, for which they toiled. The plaintive notes of the *Christian Year* awakened an echo in the ardent, generous men of the day, while Newman's *Parochial Sermons* gave expression in beautiful prose to the elevated teaching of the master. These two works exerted the greatest influence of any put forth on that side of the movement.

Little was known, beyond the limits of Oxford, of Keble's life, till Dr. Newman gave his brief but graphic portraiture, and Sir John Coleridge his beautiful *Memoir*. John Keble, who bore his father's name, sprang from a priestly line. He was born on St. Mark's Day, 1792, at Fairford in Gloucester-

shire. His father was Vicar of Coln, St. Aldwynd's, although residing at the poet's birth-place, about three miles distant from his cure. He was the eldest son and second child of Sarah Maule, whose father was the Incumbent of Ringwood. The river Coln and the Cotswold hills added greatly to the scenery around the village. Here Keble passed his early youth till he and his brother Thomas were prepared by the Vicar to go to Oxford as undergraduates of Corpus Christi College. Amid such scenes of poetic beauty and pastoral piety, the poet-priest's character was formed. The former doubtless suggested to his mind many a fine fancy, while the high example of the latter gave him the sublimest interpretation of nature in all her varied aspects. Much has been said and written about the innumerable advantages which the great public schools of England afford, and of which no private tuition or home training can take the place. We acknowledge in the main the justness of such sentiments, and we value beyond price the ample opportunities thus given to the youth of England for acquiring not only an accurate and systematic scholarship, but also a manliness and laudable independence, which are rarely the growth of home seclusion. We admit that contact with boys of equal age, under proper restraint, is very potential in spurring on the indolent, and in mortifying and shaming away selfishness and brutishness; but while we appreciate all this, and would not detract aught from those great English foundations, which are the glory of our fatherland, and the equal of which is not to be found elsewhere, we yet maintain that there exists a class of youths whose natural disposition and mental characteristics are more safely trusted within the happy influences of a rural parsonage or country home. Much of the coarse brutality of Shelley's day has passed away in the respectable public schools—and to whom is more praise due than to the writers, who have given us such graphic descriptions of its manifestations. We have often tried to conjecture how different might have been the career of 'star-eyed Shelly,' if in early life he had received such training as Keble. The touching stanzas in the introduction to the *Revolt of Islam* would never have been wrung from so sensitive a nature as his:—



—‘I will be wise,  
And just, and free, and mild, if in me lies  
Such power, for I grow weary to behold  
The selfish and the strong still tyrannise  
Without reproach or check. I then controlled  
My tears, my heart grew calm, and I was meek and bold.’

Keble's biographer remarks that Edward Copleston, afterwards Bishop of Llandaff, received the same home training as the poet, and entered a scholar of Corpus at the same time, and nearly the same age. Among the few of that small society who still live, and to whom we owe a picture of the Scholars' Common Room in the universally read *Life of Arnold* by Dean Stanley, is Sir John Coleridge. He reproduces a part of that well remembered chapter in the biography. It is too well known now for us to do more than point to it. Keble went into residence in 1806. It is hardly possible for us to realize that a warm friendship existed between men so unlike as he and Arnold. The one loved authority and antiquity; the other questioned everything, whether in Church or in State. Keble was a Tory in everything; Arnold, a liberal in creed and politics. Often Arnold stood alone, breasting the onslaught of the whole Corpus Common Room, for uttering principles which these youthful Tories thought savored of treason; yet amid such fierce and animated intellectual sparring, there were no angry words or estrangements. It was a memorable period in English history and literature. Week by week, the news of the Peninsular Campaign came in, stirring the spirit and courage of England's young blood. The 'Lake School' of poetry had just begun to call down the ruthless derision of savage critics, while early in the preceding year appeared Scott's *Lay of the Last Minstrel*, which awakened an interest in the legendary lore of the Scottish Border. To minds of so high intelligence what themes were these for friendly familiar talk! How the beauty and chaste philosophy of Wordsworth's verse must have charmed such a pure and gentle spirit as Keble's! We may say, how it gave rise to and moulded his conception of poetry as the hand-maid of religion, the soothing teacher of all that is true and beautiful and good! Those were happy days in the poet's life. Under such influences, and with such

men for his daily companions and familiar friends, his mind was gathering the treasures of learning, and his whole nature expanding into a genial and lofty Christian manhood. When he left Corpus, he gave vent to his warm love for his earliest College in beautiful verse, which has come to us through Coleridge's *Silva*, as he calls it, and bears the date of June 27th, 1811. We cannot venture to insert the whole poem :

‘Seat of calm delight, farewell !  
Home of my muse, and of my friends ! I ne’er  
Shall see thee, but with such a gush of soul  
As flows from him, who welcomes some dear face  
Lost in his childhood—yet not lost to me  
Art thou ; for still my heart exults to own thee,  
And memory still, and friendship make thee mine.’

In the Easter Term of 1810, Keble passed his last examination, and received a First Class in both classics and mathematics. Sir Robert Peel was his only predecessor in such academic laurels. Before the completion of his nineteenth year, on the 20th of April, 1811, just fifty-eight years ago, he was elected a Probationer Fellow at Oriel. Still again he was found in strange company, for Whately entered at the same time ! A year after, he gained the English and Latin Bachelor's Essays ; the one on *Translation from the Ancient Languages*, the other, a *Comparison between Xenophon and Julius Cæsar*. For a few years Keble continued to take an active interest in Oriel. He spent part of his time in private tuition at Sidmouth, where he occupied with his pupils a beautiful cottage, secured from the family of that dear friend and kindred spirit, George James Cornish. We may remark in passing, that the friend to whom Keble alludes, and whose *Stanzas to the Red-Breast* are inserted after his own for the *Twenty-first Sunday after Trinity*, was no other than Cornish. Keble seems to have cherished the memories of Sidmouth with peculiar love. Justice Coleridge has given us the exquisite poem which he wrote before leaving this delightful retreat, and the pleasant society of the village. It is entitled *Nunquam Audituræ*. In 1813 he discharged the duties of Examining Master, in conjunction with Cardwell. Of the performance of these duties, let his biogra-



pher speak: 'From several persons examined by him, I have heard that the simplicity and kindness of his manner, his thorough acquaintance with the matter of examination, together with his entire freedom from a desire of display—too common a failing, as has been said, of examining masters—made him very effective and popular in the schools.<sup>14</sup> It was during this period that Keble's mind was filled with two subjects, each of which reacted on the other. His Ordination was now constantly in his thoughts, and the health of his two sisters, Elizabeth and Sarah, particularly the latter, gave rise to much anxious apprehension. Sarah died of consumption about a year before he was ordained Deacon. His preparation for so important a step in life was made in the school of suffering. To him that sorrow, and the vocation which he was soon to make his own forever, doubtless appeared in after years, the great land-marks, distinct and vivid, on which he could look back and feel that they had given color to all his life. Such events, or crises, if we shall so term them, are common to all. How many of us can say, humanly speaking, But for that act, or that day, how different our course would have been. Accidents they are not. Chance and fatality come only to the lips of the arrogant; the humble, loving spirit looks beyond the field of vision which our poor ken can penetrate, for the unveiling of these providential marvels, which worldly wisdom cannot compass. How cheering to read what Keble wrote to Sir John Coleridge after his sister's death! 'I cannot even now persuade myself I have lost her, except out of sight. That she is happy, I have (blessed be God for it) the firmest faith, and that in her happiness she remembers us, whom living she never forgot, I fondly persuade myself. Whenever I think of this (and I have now made the thought habitual) it checks my grief, making it seem altogether selfish and unreasonable.'<sup>15</sup>

At the Trinity Ordination of 1815, which was held on Trinity Sunday, John Keble was made Deacon by Dr. William Jackson, Bishop of Oxford, and on Trinity Sunday of the succeeding year, Priest. His letters at this time are full of that tender, delicate humility, which characterized, we may say,

<sup>14</sup> Coleridge's Memoir, p. 55.

<sup>15</sup> Ibid., p. 66.

his whole life. They were thrown off as the familiar, loving utterances of friend to friend, and never, we confidently believe, did Keble dream that publicity would be given to them. But they speak more eloquently of the man than any words which biographer or reviewer could use. He needs no higher panegyric.

Immediately after his Ordination he became Curate of Burthorpe and East Leach. The two churches were but a short distance apart. Here he performed duty for eight years, and, when not at Oxford, lived with his father at Fairford, again amid the scenes of his youth. In 1818, according to the Rev. J. F. Moor, Jr., Incumbent of Ampfield, or, near the close of the preceding year, as his biographer thinks, Keble became Tutor at Oriel. His brother, Thomas Keble, then Curate of Windrush and Sherbourne, was appointed Tutor at Corpus College. The two brothers alternated the duty at East Leach and Burthorpe; the one left Oxford on one Saturday, and the other on the next. The parochial work, which came up while they fulfilled their tutorial duties, was performed by the venerable Vicar of Fairford, their father. Mr. Moor has given us an interesting sketch not only of this first curacy of Keble, but of every place connected with the 'Author of the *Christian Year*.' Here, without further remark, let us say that the beautiful volume, which his care and love have rendered so perfect both in substance and in form, is a fitting tribute to the memory of him whom it was his inestimable privilege to have known so well. It is a lovely picture that rises before our fancy. A revered father and two honored sons, whose pastoral feet trod the same parochial paths!

Keble's career while an Oriel Tutor is less barren of incident than the other periods of his uneventful life. He was accustomed to look upon nature with the eye of a poetic lover, to dwell on every feature and aspect, and to mark their changes. Summer birds, field flowers, shapeless ruins, and grassy meadows,—indeed all that nature could yield—were auxiliaries to his highly sensitive and poetic temperament. His poetry is redolent of the beauty which this gentlest of teachers opens to the pure and good. While at Oriel he had opportunity for



frequent trips in the Long Vacation, and to these rural rambles we are indebted for much of his verse. In 1819 we find him in Worcestershire and Litchfield. The next year he takes, in his annual round, his friend Noel Thomas Ellison, at Whalton, in Northumberland,—Davison, at his living of Washington, in the county of Durham,—and Charles Dyson, at Nunburnholme. These three men were his early and long-loved friends. Stanhope, too, for seven years the residence of Bishop Butler, attracted his steps. Here the learned author of the *Analogy* planned and wrote that great work, which was always a favorite with the poet. In July, 1822, he visited the Incumbent of Aberystwith—Mr. Richards, his father's old Curate, and his own valued friend. Many of the poems of the *Christian Year* were written during this period, and the scenery which these tours unfolded to the poet's eye have been reproduced in verse. The beautiful stanza which occurs in the poem for the *Twentieth Sunday after Trinity*, and which Justice Coleridge tells us the late Robertson, of Brighton, 'liked the best of all in the *Christian Year*,' was suggested while reading *Spencer*, under the shelter of a rock, as the moaning wind sighed over the 'bent grass.'

. . . . . 'The fitful sweep  
Of winds across the steep  
Through wither'd bents—romantic note and clear,  
Meet for a hermit's ear.'

The Oxford Commemoration of 1820 brought together three celebrated poets—Keble, Southey, and Heber. The latter had entered Brazenose College some twenty years before, and was then a Fellow of All-Souls. He came to his University, which but a few years before had been the scene of his successes, and whose academic bays were still fresh upon his brow. Heber at this time was about thirty-six years old. His name was admiringly mentioned at Oxford, while his fame elsewhere was gradually widening. He was a growing man, full of the refined impulses and cheerful playfulness of a character formed in the same mould as Keble's. In the Theatre, too, he heard his own prize-poem—*Palestine*—said to have been the best ever produced in the University—performed as an Oratorio.

His return to Oxford brought up memories shadowed by no cloud. His University was a hallowed place in his recollections. Far otherwise must it have been with Robert Southey. Nearly twenty-seven years had gone since an intellectual youth, dismissed from Westminster School for attacking, in a periodical edited by a few school-fellows, the system of corporal punishment, made application to enter Christ Church College. On the grounds of his school dismissal, the authorities declined to receive him. Balliol College was kinder to him. He entered her walls a red-hot republican, full of fiery impulses, and countless prejudices, yet withal a thoroughly honest and generous-hearted man. His University life closed prematurely, and he went out from the scholastic seclusion of Balliol fuller of strange schemes and unsettled views than when he entered. Coleridge, the poet, and he were ardent friends, both revolving in mind some socialistic plan of life, akin to the absurd theories of Robert Owen. The proposed colony on the banks of the Susquehanna, in the New World, never got beyond the brain in which it was born. Southey, the Jacobin, and Socinian of seven-and-twenty years before, returned to Oxford a different man. The haunts in which the youthful dreamer had once speculated upon such mad schemes, now suggested rather thoughts of the past, than plans for the future. The Southey of this period was not the Southey that Coleridge first met, when as a Cambridge Undergraduate he visited Oxford. By force of genius, and severe and patient industry, he had gained a high place in the literature of the age, and no where was he more respected than at Oxford. We thank Sir John Coleridge for refreshing our memory with an extract from Southey's letter to Neville White, in which are preserved the mingled feelings of pain and of pleasure with which he visited his University. Our readers will enjoy with us the following short extract:

'I went alone into Christ Church walks, where I had not been for six and twenty years. Of the friends with whom I used to walk there, many (and among them some of the dearest,) were in their graves. I was then inexperienced, headstrong, and as full of errors as of youth and hope and ardour. Through the mercy of God, I have retained the whole better part of my nature, and as for



the lapse of years, that can never be a mournful consideration to one who hopes to be ready for a better world, whenever his hour may come.' <sup>16</sup>

Of the impressions left by these two men on Keble's mind, we have, in his letters to his biographer and to Dyson, ample means to judge. To the latter he writes: 'I had the great delight of being introduced to the two public characters, whom of all others I should rather wish to know. I liked both exceedingly, but Heber decidedly best.'

Of Southey he remarks: 'He gives you the idea of a man forbearing to display himself; Heber, of one into whose head no such thing ever entered. Nevertheless, Southey quite made good his ground in my favour, more completely a good deal than I had expected. He is now an orthodox man, and the faults of his views in ecclesiastical matters are, as far as I could judge from what he said, the faults into which such persons are most apt to fall—making religion too much a matter of politics—and the like.'<sup>17</sup>

Sir J. Coleridge thinks that Keble, in his comparison of these two men, revisiting their University under such different auspices, and in such different frames of mind, has not dealt quite fairly with Southey. It is easy to discover Sir John's not impartial feeling for one who was from early years the dear friend of his gifted and unhappy uncle, S. T. Coleridge, and in later life, also his own. We respect the feeling, and honour him for the tender defence of a departed friend against the no less tender impression of another friend himself departed. We always regarded Southey as a little vain; yet after all was it not a harmless vanity? If any man can be excused for such an infirmity, that man is Robert Southey. Where, in the history of literature, is to be found a braver and more unselfish career than his life of nearly sixty-nine years? Poverty, slander, neglect, and sorrow, could not darken the buoyancy of his spirit. Southey had grave faults, and in early life made many missteps, but, as Richelieu is made to say in Bulwer's drama, were his 'sins not those of circumstance?' Who can recall that gray-haired man in semi-lunacy, seated in his well-filled library at Greta, without a deep thrill of tenderness in remem-

<sup>16</sup> Coleridge's Memoir, p. 97.

<sup>17</sup> Ibid., p. 94.

bering that for three long years before his death, he could work but little; that his mind was fast breaking up? Or who can read the pathetic lines addressed to London friends, when urged again to visit the metropolis, and not love the memory of the man whom an overworked brain had rendered so fatally imbecile? We cannot dwell longer on the closing scenes of such a heroic life, which merits all the feeble praise that we can bestow. It is a pleasant thought that the earnest Churchman and the Poet of the *Christian Year* loved and admired each other.

In 1823 Keble resigned his Tutorship. This, in conjunction with his mother's death, which occurred on Sunday morning, May 11th, closed his connexion with Oriel as a resident. It was his custom to spend Saturday at home; and on the Monday following the departure of his mother, whom he loved with the most filial devotion, he went back to his duties at his college, returning to Fairford on the Saturday preceding the funeral. In ordinary men, we should be apt to feel that this strict adherence to duty rather betokened a want of natural affection. Indeed it is hard for us to comprehend how it is possible for one so to control his feelings, as that he could perform the usual round of duties; but in Keble, who lived so far above the world, there was a real faith which sustained him under life's bitterest sorrows. He dwelt not on the separation here, but on the reunion hereafter. He believed, too, that the faithful departed, who are at rest in Paradise, still possess some interest in those whose earthly course is not yet completed. This teaching he has elaborated in that gem on *Bereavement*, in the *Lyra Innocentium*, to which Sir John Coleridge refers. We are almost tempted to say, that of all Keble's poems, it is the one which we like best. With all its heavenly teaching, it is so thoroughly human—it touches the chords of purest love in our hearts. On a bright April morning two sisters are gathering spring flowers, the younger,

'A dimpled three years' child,'

on whose tender arm hangs a basket, which

'Contained her precious store;'



the other,

'A maid who scarce twelve years had told :  
So walk'd they side by side '

The summer had passed, and on a warm autumnal Sunday, the younger was laid in her tiny grave. The poet thus speaks to the guardian sister :

'Thou mourn'st to miss the fingers soft  
That held by thee so fast,  
The fond appealing eye, full oft  
Tow'rd thee for refuge cast.

'Sweet toils, sweet cares, forever gone!  
No more from stranger's face,  
Or startling sound, the timid one  
Shall hide in thine embrace.

'Thy first glad earthly task is o'er,  
And dreary seems the way ;  
But what if *nearer than before*  
She watch thee even to-day ?

'What if *henceforth, by heaven's decree,*  
*She leave thee not alone,*  
*But, in her turn, prove guide to thee,*  
*In ways to Angels known ?'*

Keble, in leaving Oriel, received as a testimonial of love from his pupils, a service of plate bearing this inscription and date: '*Johanni Keble Discipulorum Oriensium pietas MDCCCXXIII.*' In returning again to Fairford, the poet continued his pastoral work at East Leach and Burthorpe, adding, however, a third curacy, the small parish of Southorpe, to whose vicarage-house he then removed. While discharging the duties of his high office among a plain country people, he was called by Bishop William Hart Coleridge to become Arch-deacon of Barbadoes, the West Indies being about to be divided into two dioceses. At another period of life, he might have considered a call from a Bishop whom he had known, and loved, at Oxford ; but the claims of an only surviving parent, whose health seemed to be giving way, prevented him from listening to this, or any call, which would necessitate a distant removal. Through the influence of Sir William Heathcote, his former

pupil and fast friend, he was offered the curacy of Hursley. Aside from motives of duty, Hursley was just the spot that in all respects was suited for the poet-pastor. Hursley Park, the residence of his old pupil, opened to him a refined and congenial society, while the country in the vicinity was varied enough to break the monotony of the scenery; then, too, it was not so very far distant from his father's living. After some weeks of deliberation, he accepted the curacy, and entered upon his duties in October, 1825. He held Hursley curacy but a year, and among his visitors during his short sojourn, was his old Corpus friend, 'Tom Arnold,' as he called him, who then resided with his pupils at Laleham. Of him he writes at this date, as follows: 'How very unaltered he is, and how very comfortable and contented; he is one of the persons whom it does one good to think of when I am in a grumbling vein.'<sup>18</sup>

The unexpected illness of his younger sister, Mary Ann, hastened his return to Fairford. But three years had passed away since the decease of his mother, when he was again summoned to take up afresh the domestic cross. A few days after his return to his father's saddened home, Mary Ann entered into her rest. It was a heavy blow to the family, which was gradually decreasing in numbers, although bringing together the few that survived. The father and Elizabeth, the eldest daughter, for many years an invalid, constituted the inmates of that home diminished by death and other removals. Thomas Keble, the poet's brother, had married, and the care of the two that remained devolved upon the curate of Hursley. Keble thought not of his pleasant lines, cast as they were in a goodly place, which to him was an earthly Paradise; higher claims excluded all such considerations. It was now plain to him that his first duty was to his aged father and invalid sister; so he resigned Hursley curacy, and in a short time was again an inmate of the vicarage-home at Fairford. Toward the close of the year, the infirmities of age rendered it impossible for his father to continue in the discharge of his clerical duties. His son filled his place in the parish. The village of Coln St. Aldwyn's, or as Mr. Keble, Sr., used to spell it, St. Aldwin's,

<sup>18</sup> Coleridge's Memoir, p. 131.



was three miles distant from Fairford. It received its name from the river Coln, which runs through the village. The poet's father held the living for half a century, and two east windows in the church perpetuate the memory of a saintly man and faithful pastor.

In one respect, at least, the year 1827 was the most memorable in Keble's life. It witnessed the publication of the *Christian Year*, by which he is now best known. Archdeacon Heathcote died in 1829, and his nephew Sir William offered the vicarage of Hursley to Keble. He declined it, for the same reason that, a few years before, led him to relinquish the curacy. In the months of March and October of the years 1830 and 1831, the poet acted as one of the Examiners at the India House. A few years before, these Examinations were founded by an Act of Parliament, that the East India Company might secure the civil services of a larger number of candidates than Haileybury could supply. The two English Universities each appointed two Examiners. As early as 1821, nearly seven years before the *Christian Year* was published, Keble's name was mentioned for the then vacant chair of the Poetry Professorship at Oxford. 'This,' says Sir John Coleridge, 'is usually held by two successive elections for ten years.' Keble, when he heard that Henry Hart Milman was a candidate for the office, would not allow his own name to be presented. The late Dean of St. Paul's stood high in his University. His scholarship and poetic powers were well known. The success of his first Tragedy—*Fazio*, which was well received on the boards of Drury Lane Theatre, made his name familiar to the literary circles of the day; while the *Fall of Jerusalem*, published only a year before, was still in the hands of the reading public and on the table of the critics. Keble and Milman, between whose ages there was a difference of but a few months, mutually admired each other. The former was too generous to obstruct the path of his early friend. Ten years later, Keble was elected to the Professorship, and began his course of lectures early in 1832. These lectures have been issued from the Oxford press under the title of *Praelectiones Academicæ*.

We have now reached that period in Keble's life when mat-

ters of intensest interest filled men's minds. It was a time of confusion, doubt, and perplexity; the starting point in the history of that movement, of which, as we have elsewhere remarked, Keble was the author. John Henry Newman, although abroad, saw the lowering clouds of an impending storm. The motto of the *Lyra Apostolica*, which was then begun, and the farewell words he uttered when he and Hurrell Froude bade adieu to Rome and Monsignore Wiseman, who hoped to see them again in the Eternal City, attest that his penetration discerned the conflict, and he hastened homeward bristling for the battle. 'Catholic Emancipation' agitated the whole realm of England. The Church and State party opposed the act with measureless venom. With them, Keble could not sympathize. The Church, the Catholic Church, the glorious Kingdom of Christ founded eighteen hundred years ago and watered through long years of persecution by the precious blood of Martyrs, Confessors, and Holy Virgins, rose before his vision. It was to him the centre of all love, from which alone shone forth the luminous glory of its Divine Head, the God-man. The irradiation from such a picture fired the rapt but subdued soul of the poet and priest. Whiggism, on the other hand, although advocating a repeal of 'Catholic disabilities'—a measure which had the sympathy and approval of Keble—he could not act with. The ruling *animus* of the Earl Grey Administration was patent to him. The thunder cloud broke. Three Irish bishoprics were suppressed, and a yet greater evil lay in the future. The Church by the party in power was looked upon only as the mere creature of the State, and its apostolicity was regarded as the mythic legacy of an untutored age. Keble's gentle and loyal spirit could brook anything but this. To lay violent hands upon the Church, the Body of Christ, was the signal for war. The Vice-Chancellor appointed Keble in 1833 to preach the Oxford Assize Sermon. On Sunday, July 14th, of that year, he sounded the tocsin of alarm from the University pulpit. This sermon, entitled *National Apostasy*, was afterwards published. The seed sown on that Sunday took root, and soon bore fruit. 'That day,' Newman 'ever considered and kept as the start of the religious movement of 1833.'



A month had scarcely elapsed before we find Keble planning a scheme by which he proposed to teach 'the distinctive and forgotten doctrines of the Anglican Communion,' in a cheap and accessible way. Letters written at this time to various friends, enlisting their co-operation, are given by his biographer. We quote from one written to Dyson on the 26th of August of that year:

'What think you of a kind of association (as quiet and unpretending as may be, if possible even without a name,) for the promotion of these two objects? first, the circulation of primitive notions regarding the Apostolical Succession, &c.; and secondly, the protection of the Prayer-book against profane innovation. We have as yet only written round to a few intimate friends, Davison, Ogilvie Tour, &c., and as far as they have answered me yet, they seem to think it may do good. To give you a notion of the kind of thing, the first Tract we propose to print will be a Penny account of the martyrdom of St. Ignatius, with extracts from his Epistles.'<sup>19</sup>

Thus from this small beginning resulted the famous *Tracts for the Times*, whose history Dr. Newman has written, to use the words of Dr. Pusey, 'in the wonderful self-analysis of his *Apologia*.' The Tracts continued to be put forth till Number 90, bearing the date of the *Feast of the Conversion of St. Paul*, 1841, suddenly brought the series to a close. The sequent history is known to all.

The loss of Newman was irreparable to Keble. Only a few years before the death of the latter, occurred at Hursley this touching incident, preserved to us by Mr. Hedgeland, of Penzance. Pointing to a chalk-pit, the poet said to his visitor: 'Ah, this is a sad place, that is connected with the most painful event of my life. It was there that I first knew for certain that J. H. N. had left us. We had just made up our minds that such an event was all but inevitable, and one day I received a letter in his handwriting. I felt sure of what it contained, and I carried it about with me all through the day, afraid to open it. At last I got away to that chalk-pit, and then forcing myself to read the letter, I found that my forebodings had been too true; it was the announcement that he was gone.'<sup>20</sup>

Thus separated in body two loving friends. Dr. Pusey's

<sup>19</sup> Coleridge's Memoir, p. 211.

<sup>20</sup> Ibid., p. 480.

letter to the editor of the *Guardian*, bearing the date of October 9th, 1865, speaks Keble's tender feelings as well as his own. A statement had appeared in an English local paper, that he and Dr. Newman were 'reconciled after twenty years.' He writes: 'The deep love between us, which now dates back above forty years, has never been in the least overshadowed. His leaving us was one of the deep sorrows of my life, but it involved separation of place, not diminution of affection.' Of this meeting of Pusey, Keble, and Newman, the latter has furnished an account at the solicitation of Sir John Coleridge, who has incorporated it into his Memoir of Keble. Newman, at the invitation of the vicar, repaired to Hursley in September, 1865. When he reached the vicarage, writes Newman, 'Keble was at his door speaking to a friend. He did not know me, and asked my name. What was more wonderful, since I had purposely come to his house, I did not know him, and I feared to ask who it was. I gave him my card without speaking. . . . . Then he brought me into his study, and embraced me most affectionately, and said he would go and prepare Pusey and send him to me. . . . . Pusey was full of the question of the inspiration of Holy Scripture, and Keble expressed his joy that it was a common cause, in which I could not substantially differ from them; and he caught at such words of mine as seemed to shew agreement. Mr. Gladstone's rejection at Oxford was talked of, and I said that I really thought that had I been still a member of the University, I must have voted against him, because he was giving up the Irish Establishment. On this Keble came close to me, and whispered in my ear, (I cannot recollect the exact words, but I took them to be,) "And is not that just?" . . . . . Just before my time for going, Pusey went to read the Evening Service in church, and I was left in the open air with Keble by himself. . . . . We walked a little way, and stood looking in silence at the church and church-yard, so beautiful, so calm. Then he began to converse with me in more than his old tone of intimacy, as if we had never been parted.'<sup>21</sup>

And now there rises before our vision a beautiful picture

<sup>21</sup> Coleridge's Memoir, p. 517.



drawn by the same word-painter in old Oriel years ago. We have been looking at it of late, and it is more delicately touching after the lapse of years. We refer to the beautifully written chapter on Basil and Gregory, in the *Church of the Fathers*. In outline it unconsciously delineates two early Oxford friends. Substitute Keble and Newman for Basil and Gregory, Oxford and England for Athens and Greece, and the canvas is instinct with life :

'Athens and letters followed on my stage,  
Others may tell how I encountered them ;—  
How in the fear of God, and foremost found  
Of those who knew a more than mortal lore ;—  
And how, amid the venture and the rush  
Of maddened youth with youth in rivalry,  
My tranquil course ran like some fabled spring,  
Which bubbles fresh beneath the turbid brine ;  
Not drawn away by those who lure to ill,  
But drawing dear ones to the better part.  
There, too, I gained a further gift of God  
Who made me friends with one of wisdom high,  
Without compeer in learning and in life.  
Ask ye his name ?—in sooth, 'twas Basil, since  
My life's great gain,—and then my fellow dear  
In home, and studious search, and knowledge earned.  
May I not boast how in one day we moved  
A truest pair, not without name in Greece ;  
Had all things common, and one only soul  
In lodgment of a double outward frame ?  
Our special bond, the thought of God above,  
And the high longing after holy things.  
And each of us was bold to trust in each,  
Unto the emptying of our deepest hearts,  
And then we loved the more, for sympathy  
Pleaded in each, and knit the twain in one.'

Gently let us draw the veil over such a vision of the mourner and the mourned. We cannot quit this eventful period in Keble's life without attempting some analysis of the two friends, at the point in which they took divergent paths, or instituting what Plutarch calls the *σύγκρισις* ; the comparison is by no means an easy one. It is not unreasonable to inquire how it came, that men holding the same great underlying principles of theology, should in the end attain such dissimilar results.

Aside from the difference of mental phenomena, Keble from infancy lived in an atmosphere of domestic love and loyal faith. The first instincts of his childhood were nurtured in a loving home circle, in a happy, peaceful, English parsonage. The earliest memories coupled together that cheerful home and the Church, and forever through a long life they were inseparable, the one from the other. Then, too, we are inclined to think Keble's nature was more susceptible to home influences than Newman's. For him to leave the Church of which his dearly loved father was a priest, and in whose every thought and memory of early life that Church stood out as his guide, at whose bosom the fathers of generations gone by had been fed—to forsake her altars was to place the home of his ancestors beneath an Interdict. Of Dr. Newman's early life we know little, and from the little that he has given us in his *Apologia*, we can easily see that the influences which awakened Keble's deepest love toward the Church of England never invested her with such endearing associations with him. But beyond this diversity of circumstances, we notice an essential unlikeness in the natural temperament and mental constitution. Keble in the main rested his faith on instinct and intuition. He did not push his reasoning to the farthest verge of logical deduction and reject conclusions which would not admit of severe demonstration. From Bishop Butler he took the theory that probability is the guide of life, and on it he engrafted a second theory, that religious truth gains its certainty not from the probable arguments by which we receive it intellectually, but by the faith and love which we direct towards its Divine Object. This enlarged theory of Butler, Dr. Newman says he accepted for a time, and re-enlarged it in public teaching, but, finally, abandoned it for what he regarded a more demonstrable view of revealed truth. Keble's faith was that of rest—Newman's of continual doubt and unrest. His mental sufferings were somewhat akin to the no less keen struggles of Blanco White and poor John Sterling, and yet no poem in our language breathes a deeper calm and content than those stanzas of his, written on an orange boat, while becalmed in the Straits of Bonifacio:



'Lead kindly Light, amid th' encircling gloom,  
Lead Thou me on ;  
The night is dark, and I am far from home,  
Lead Thou me on ;  
Keep Thou my feet ; I do not ask to see  
The distant scene ;—one step enough for me.' <sup>22</sup>

We have anticipated events somewhat in the digression to Tract 90 ; we now return to the close of the year following the start of the movement. In November, 1834, Keble's father took his bed, and in quiet confidence and trust, awaited his last earthly summons. Full of years and labors, the beloved father and devoted priest was released from earth on the 24th of January, 1835. His life needs not the pen of the encomiast. It is enough for us to know that he moulded such a man as John Keble, Jr. The father's life and character are best reflected in that of the son. Keble and Elizabeth, his only surviving sister, soon after their father's death removed to and continued to reside at Coln St. Aldwyn's till the following June, when they prepared to take leave of Fairford living. Dr. Johnson used often to remark, that we never do anything for the last time without sadness. It is always sad to quit forever childhood's home—and such a home as his was, made it doubly hard for the poet. In Fairford he gathered up the hallowed memories of all that makes youth dear. Here he first saw the light ; and here, too, four of the family departed this life in peace. But like most deep sorrows which come to us, there is always some accompanying compensation, which extracts part of the sting. Two important events, in point of time near each other, now occurred. To Keble they were fraught with results which gave color to the rest of his life. The one was his engagement with Miss Charlotte Clarke, daughter of his father's old friend, the late Rector of Meysey-Hampton and younger sister of Mrs. Thomas Keble. The marriage was performed on the 10th of October, 1835, in the parish Church of Bisley, of which his brother was once the vicar. Mr. and Mrs. Keble, after their marriage, took residence at Southampton till the parsonage at Hursley was prepared for them. The other event was his final settlement as

<sup>22</sup> *Lyra Apostolica.*

Incumbent of Hursley, to which Otterbourne was attached. Mr. Heathcote having, from ill health, resigned the living, Sir William again presented it to his old friend and tutor. Keble was instituted early in 1836, and here the unambitious pastor and Christian poet passed the remainder of his days in the faithful discharge of the duties of his priestly vocation.

At the Oxford Commemoration of 1839, it devolved upon Keble to pronounce the *Creweian Oration*. It formed one of the pleasant episodes of his University life, for he met here for the first time the poet Wordsworth, who had come up to Oxford to receive an honorary degree. A literary revolution was slowly changing the tone of English poetry, but not without a struggle. The Byronian school was gradually yielding to this influence and slowly breaking up. In its stead, Wordsworth introduced principles which have given a purer ring to nearly all our recent poetry of marked merit.

Wordsworth came to the University when his fame was deepening and widening, and the author of the *Christian Year* thus beautifully introduces the poet's name to the crowded theatre of Oxford: 'I might, in addition, here insist on this, that with the University, and so also with Letters themselves, it cannot be well without that severe and solid sweetness of spirit with which the youth of the poor, well and wisely spent, is wont to imbue those who are trained in her school. But I judged, gentlemen of the University, that I should satisfy, and more than satisfy, what this topic demands, if only I should recall to your recollection him, (specially now as in this honorable circle which surrounds me he is himself present,) who, of all poets, and above all, has exhibited the manners, the pursuits, and the feelings, religious and traditional, of the poor,—I will not say in a favorable light merely, but, in a light which glows with the rays of heaven. To his poetry, therefore, they should, I think, be now referred, who sincerely desire to understand and feel that secret harmonious intimacy which exists between honourable Poverty, and the severer Muses, sublime Philosophy, yea, even our most holy Religion.'<sup>23</sup>

Keble met Wordsworth at the rooms of the late Frederick

<sup>23</sup> Coleridge's Memoir, p. 249.



William Faber, of Magdalen College; for we think Justice Coleridge mistaken, when he writes F. A. Faber. We feel confident that Wordsworth and Keble were brought together at Magdalen by the author of that charmingly written volume, *Sights and Thoughts in Foreign Churches and among Foreign Peoples*, which was dedicated to Wordsworth 'in affectionate remembrance of much personal kindness, and many thoughtful conversations on the Rites, Prerogatives, and Doctrines of the Holy Church.' Mr. Faber was lost to the English Church years ago, and became an eminent devotional writer of the Roman Communion. He collected into a volume many exquisite poems written before and after he left the Anglican Church. The well-known and frequently quoted stanzas written in a lady's album, beginning, 'Hearts good and true,' were from his pen. He died a few years since, at the London Oratory, of which he was a priest.

Mrs. Keble's health had suffered for years, and at stated periods in their married life, we find the poet and his wife making visits to the sea-shore and elsewhere, that she might receive benefit from change of air and scene. At St. Brelade's Jersey, at Sidmouth, at the Isle of Man, and in North Wales, they sojourned awhile in different years. In 1857 a tour on the Continent was made. Penzance and Torquay were each visited. On Sunday, the 8th of October, 1865, Keble appeared for the last time in Hursley Church. He read the Lessons and celebrated the Holy Communion. On the Wednesday following, he set out with Mrs. Keble for Bournemouth. Her health was rapidly failing. While at Bournemouth, and almost in the very chamber of death, he wrote his well-known letter on the *Ritual of the Church of England*. It appeared in the *Literary Churchman* in the same month that he left Hursley.

We are now nearing the end. While reading the Lessons to Mrs. Keble on the 22d of March, he was attacked with a paralysis, slight at first, but soon developing its more aggravated features, and 'he was unwillingly wheeled out of her room; and they who for so many years had had but one heart and one mind, parted for life, with one silent look at each other.' At one o'clock on the 29th of March, 1866, he fell asleep as peacefully as a little child in its mother's arms.

On Friday, the 6th of April, being Easter Week, a large assembly was seen at Hursley. Dr. Forbes, Bishop of Brechin, whom Keble had comforted in days of trial, and Dr. Hamilton, Bishop of Salisbury, came, with the Deans of Chichester and Winchester, the Archdeacons of Gloucester and Winchester, and a number of clergy, to mingle their tears. Among the sorrowing throng was the venerable Dr. Pusey, the life-long and devoted friend. The pall-bearers were the clergy who had formerly been connected with Keble in parochial work. In his own church-yard, under the shadow of the Church of All Saints, whose 'spire is so beautiful an object from so many points,' and whose weather-cock was placed on its apex by his own hands, the poet and pastor sleeps.

Mrs. Keble lingered for six weeks, and on the 11th of May she was released from earth to join her husband.

From Keble, the man, we now turn to Keble, the author.

In 1830, the delegates of the Clarendon press invited Keble to edit the works of Richard Hooker. From early life he was a great admirer of the judicious divine, and we are told that he wrote the exquisite poem, afterwards published in the *Lyra Apostolica*, by the grave of Hooker, which he visited in 1817 with his early friend John Tucker, who still survives him.

'Voice of the wise of old !

Go breathe thy thrilling whispers now  
In cells where learned eyes late vigils hold,  
And teach proud Science where to vail her brow.

'Voice of the meekest man !

Now while the Church for combat arms,  
Calmly do thou confirm her awful ban,  
Thy words to her be conquering, soothing charms.

'Voice of the fearless Saint !

Ring like a trump, where gentle hearts  
Beat high for truth, but, doubting, cower and faint :—  
Tell them, the hour is come, and they must take their parts.'

After six years of careful research and study, he published his edition of the *Ecclesiastical Polity*. Hallam, in his *Constitutional History of England*, had claimed the genuineness of the last three books, as we then received them ; but he now



accepted the evidence which the faithful editor of Hooker produced, specially in regard to the Sixth Book, and recorded the correction in future editions of his history. Keble's valuable preface to Hooker is now within the reach of all who desire to study further the singular history of that evidence, and it is well worth a careful perusal. Sir John Coleridge remarks, that 'the lapse of thirty years has brought to light little, if any, new matter, and detected Keble in no substantial error. His edition, the Clarendon Edition, still remains, and probably will remain, the standard one; and this is a distinction which Oxford cannot lightly afford to lose in regard to the works of her great son.'<sup>24</sup>

The lectures which Keble gave while holding the Poetry-Professorship, he afterwards published, dedicating them to the admiring and admired Wordsworth, whom he recognized as the '*Vates vere sacer, qui legentium animos semper ad sanctiora erigeret. . . . Non solum dulcissimae poeseos, verum etiam divinae veritatis Antistes.*' That part of the chapter in the *Memoir* which relates to the *Praelectiones Academicæ*, deserves to be transcribed in full, and we regret that our space limits our wishes. We fully agree with Sir John Coleridge, when he says, 'I do regret extremely that the Lectures were not originally composed in English. . . . We boast nationally of our scholarship, and there is no doubt for a scholar much pleasure in composing, and not a little in reading, good modern Latin; but after all, to write in Latin is to write for readers comparatively so few, that when we do so, we may be said almost to seal up our thoughts from the public. But the Professor of Poetry at Oxford has a duty of a popular character; he has not to make poets, or even scholars, but to improve poetical taste, to regulate critical judgment, to enlarge and systematize knowledge as to the great poems of the world; and all this demands the freedom of a native language both for the lecturer, the audience, and the readers. Mr. Gladstone has happily characterized the *Praelectiones* in one point of view, when he calls the course a "refined work," and he has truly said that it "criticises the Homeric Poems in the spirit of a

<sup>24</sup> Coleridge's *Memoir*, p. 194.

bard, setting an early example, at least to England, of elevating the tone of Homeric study.”<sup>25</sup> One regrets to think that such a book on such a subject should not be accessible, without difficulty as to the language, to every educated woman as well as man.’<sup>26</sup> The proposal to translate the *Praelectiones* was brought to the lecturer’s attention at different times, and even so late as the beginning of the year 1866, when a stranger, whom he met at Bournemouth, revived the subject. We still hope that the work will be accomplished by some son of Oxford, as a tribute to the memory of the illustrious Professor and Poet.

When the association was formed for editing a *Library of the Anglo-Catholic Fathers*, Keble assumed the editorship of a complete edition of the works of Dr. Wilson, late Bishop of Sodor and Man, to which he proposed to add a life of that distinguished divine. As far back as 1849, he made a trip to the Isle of Man, having the double purpose in view, of improving Mrs. Keble’s health, and collecting materials for his *Life of Wilson*. Many circumstances interfered with the progress of the work, and it was not completed till 1863. It now forms the first volume of *Wilson’s Works* published by Parker of Oxford, although it consists of two parts, each of which makes a separate volume. Keble dedicated it to his brother, the Vicar of Bisley, Gloucestershire. Two Lives of Bishop Wilson preceded Keble’s, the one by the Rev. Clement Crutewell, and the other, at a much later date, by the Rev. Hugh Stowell, Rector of Ballaugh, Isle of Man. Keble has exhausted the field, and left nothing for future writers to accomplish in respect to Wilson. As an editor and biographer, he has performed his labor with great conscientiousness and completeness of detail. His editions of Hooker and Wilson are monuments of his unwearying industry and scrupulous investigation, and will occupy a permanent place in theological literature so long as Hooker and Wilson are read.

Among his other writings in prose are his work on *Eucharistical Adoration*, his *Village Sermons on the Baptismal Service*, and single sermons on various subjects, published from time to time. We merely mention them in passing, and turn from Keble, the theologian, to speak of Keble, the poet.

<sup>25</sup> Homer, Vol. III. p. 374.

<sup>26</sup> Coleridge’s Memoir, p. 204.



In a Review of Josiah Couder's *Star in the East, with other Poems*, Keble defines the poetic canon by which his own Muse was probably guided in her rapt but sustained flights. Irrespective of the value, to which his opinions on this subject are entitled, it is interesting to see how nearly he attained to the standard, by which he measured others, whose inspiration caught its glow from the same celestial source.

'It is required, we apprehend, in all poets, but particularly in sacred poets, that they should seem to write with a view of unburthening their minds, and not for the sake of writing; for the love of the subject, not of the employment. . . . That the feelings the writer expresses should appear to be specimens of his general tone of thought, not sudden bursts and mere flashes of goodness. Wordsworth's beautiful description of the Stock-dove might not unaptly be applied to him:

'He should sing of love with silence blending,  
Slow to begin, yet never ending,  
Of serious faith and inward glee.'

'Some may, perhaps, object to this, as a dull and languid strain of sentiment. But before we yield to their censures we would inquire of them what style they consider, themselves, as most appropriate to similar subjects in a kindred art. If grave, simple, sustained melodies—if tones of deep but subdued emotions are what our minds naturally suggest to us upon the mention of sacred *music*—why should there not be something analogous, a kind of plain chant, in sacred poetry also? fervent, yet sober; awful, yet engaging; neither wild and passionate, nor light and airy; but such as we may with submission presume to be the most acceptable offering in its kind, as being indeed the truest expression of the best state of the affections. To many, perhaps to most, men, a tone of more violent emotion may sound at first more attractive. But before we *indulge* such a preference, we should do well to consider, whether it is quite agreeable to that spirit, which alone can make us worthy readers of sacred poetry. *Εὐθεὸν ἢ ποίησις*, it is true: there must be rapture and inspiration, but these will naturally differ in their character as the powers do from

whom they proceed. The worshippers of Baal may be rude and frantic in their cries and gestures; but the true Prophet, speaking to or of the true God, is all dignity and calmness.<sup>27</sup>

The *Christian Year* appeared in 1827, and few who are at all familiar with its strains, will fail to recognize how aptly and delicately he has fulfilled, what, to his mind, was the mission of the true poet. The time has gone by for us to attempt any analysis of this book, 'which has already become one of the classics of the language,'<sup>28</sup> having reached its 92d edition in England in the lifetime of the author.

The refrain of the entire book is, that within us is something which is above nature; that life is only noble as it is lived after the Divine Example. Obscure riddles we may meet, which we cannot fathom; intricate problems, which we can never solve; countless miseries, which we can never heal; and deep heart-sorrows, which we can never soothe; yet life is noble, and the more fully we become conscious of its intense reality and value, the more truly we believe the sublime paradox of Milton, that

'They also serve who only stand and wait.'

In 1836, Newman collected into a volume known as *Lyra Apostolica*, the poems which appeared in the *British Magazine* under the editorship of the late Hugh James Rose. Froude chose the motto for the book from a *Homer* borrowed from M. Bunsen. It forms part of the prayer of Achilles on his return to battle, when he supplicates the Heavenly Powers to make his foes know the difference, now that he is back—

Γνοῖεν δ' ὥς δὴ δηρὸν ἐγὼ πολέμοιο πέπαυμαι.<sup>29</sup>

The poems were published, says the editor, 'in the humble hope that they may be instrumental in recalling or recommending to the reader important Christian truths which are at this day in a way to be forgotten.' Five writers contributed to the *Lyra* besides Newman, and their verses were severally indi-

<sup>27</sup> Quarterly Review, Vol. XXXII. pp. 217, 219.      <sup>28</sup> Apologia, p. 68.

<sup>29</sup> Iliad Σ. 125. Apologia, p. 82.



cated by Greek characters: *α.* J. W. Bowden; *β.* R. H. Froude; *γ.* John Keble; *δ.* J. H. Newman; *ε.* R. I. Wilberforce; *ζ.* Isaac Williams. By far the greatest number of the poems were written by Keble and Newman.

We recall the *Lyra* now, only because the subject of our paper was intimately connected with it. It is remarkable, also, that a candid examination of these poems more fully substantiates the truth of our remarks in reference to the difference between these two men. Newman's are as polished as a Damascus blade; Keble's as clear and quiet as a limpid rivulet. The one writes as a warrior with lance in rest; the other as a shepherd with his pastoral crook. *Oxford (From Bagley, at 8 A. M.,) The Churchman to his Lamp, The Winter Thrush, and Burial of the Dead*, are in Keble's finest vein. The same tender and homely feeling pervades them, the same spiritual life with which he clothed the simplest scene, or event of every day life, elevating everything that his poetic fancy touched. The latter poem was written on the 5th of March, 1827, and his sister's funeral is commemorated in its pathetic verse. We can only give a few stanzas:

'I thought to meet no more, so dreary seem'd  
Death's interposing veil, and thou so pure,  
Thy place in Paradise  
Beyond where I could soar;

'Friend of this worthless heart! but happier thoughts  
Spring like unbidden violets from the sod,  
Where patiently thou tak'st  
Thy sweet and sure repose.

'One look, and we have seen our last of thee,  
Till we too sleep, and our long sleep be o'er;  
O cleanse us, ere we view  
That countenance pure again,

'Thou, who canst change the heart, and raise the dead;  
As Thou art by to soothe our parting hour,  
Be ready when we meet,  
With Thy dear pardoning words.'

'I can hardly suggest,' writes Coleridge, 'why he wrote "brother" for "sister" in the stanza towards the close; perhaps it might be consideration for those who would first see the poem,

whom he would not touch too closely; or it might be from his habitual shrinking from putting himself, or his own spiritual sorrow, before the public eye, that he would generalize this most touching incident in the poem.' <sup>30</sup>

Keble's version of the Psalms in metre, known as the *Oxford Psalter*, was published in May, 1839. It was dedicated to the then Bishop of Oxford, the late Dr. Bagot, and tacitly allowed in use in the diocese of Winchester, by the present Bishop. Of the work itself, and the difficulty of the task assumed, Coleridge well says: 'He who versifies the Psalms, therefore, for choral singing, should have some musical science, and much musical taste. Keble was not well qualified in these respects, nor am I competent to say how far he has succeeded. But I have confidence in his version being faithful, and I think I find it useful to refer to when I want to extract the meaning of an expression in our authorized versions, or to trace the sequence of the argument.' <sup>31</sup>

In May, seven years after the publication of the metrical version of the Psalms, Keble put forth his last volume of sacred poetry. It is more than probable that the *Lyra Innocentium* would have appeared as a posthumous publication, had it not been that the urgent need of funds for the restoration of Hursley Church hastened its appearance. The *Lyra* was well received, but it has never attained the very great success which the *Christian Year* long since met with. It consists of *Thoughts in Verse on Christian Children, their Ways, and their Privileges*, and was originally designed to take the place of a *Christian Year* 'for Teachers and Nurses.' The poems are grouped together under ten distinct headings. They appeal to the heart of readers who have a love for the young, in rich conceptions of lyric power and simplicity. In a measure, the order of the Liturgy suggests themes, which to a less spiritual mind than Keble's are common-place, and far removed from the familiar and neglected state of childhood. The care and exactness with which he has treated this virgin soil, never before cultivated to any extent by sacred poets, illustrates the surpassing fecundity of his lyrical greatness. Under the divi-

<sup>30</sup> Coleridge's Memoir, p. 137.

<sup>31</sup> Ibid., p. 247.



sions—*Holy Baptism, Cradle Songs, Early Encouragements, Early Warnings, Children's Troubles, Children's Sports, Lessons of Nature, Lessons of Grace, Holy Places and Things, Holy Seasons and Days*—Keble has drawn from every conceivable aspect and combination of youthful life and experience, beautiful and healing truths and lessons, which are as fragrant and as pure as the innocence and loveliness of infancy itself. His delineations of childhood's joys and sorrows are full of the 'gold, frankincense, and myrrh,' of a chastened and finely etherealized spirit. Pictures they are, fresh from the heart, and drawn in a severe and Scriptural chasteness of taste, as marvellous as it is rare. They embody a sweetness, grace, and purity of expression which are near of kin to that which the *Madonnas* of Leonardo da Vinci, Paul Veronese, or Raphael, communicated to the beholder. A friend of Sir John Coleridge—a young mother—happily calls it 'a *mother's book*.' We adopt the expression, for it conveys in two words just what we wish to say; and if it were read more constantly, it would secure its own place in the heart of loving maternity, and in the reverent regard of all who have much to do with Christian nurture and training. The *Lyra* also commends itself to the lover of lyric poetry in general, for it rarely falls below the measure of Keble's power in epigrammatic strength and rhythmical versification. We have already mentioned the pathetic poem entitled *Bereavement*, from which Mr. Eddis, the artist, has made two studies; and the engravings, if not the source from which they are derived, are generally well known. Many of the poems are read and re-read, and not a few feel that such teaching, so beautiful, so pure, is a far nobler bequest than the more elegantly finished lyrics of Campbell, Wolfe, or Gray. Lord Mahon, the historian, has somewhere narrated the story of Wolf, who fell, under the walls of Quebec, in 1759, that the *Elegy in a Country Churchyard*, published ten years before, made so deep an impression on the young soldier, that he professed to a fellow officer, the late Professor Robinson, of Edinburgh, who was in the same boat with him, that he would rather be the author of that poem, than wear the martial laurels which would wreath his brow, if the bombardment of the

heights of Quebec should prove successful. There are others, heterodox as it may seem, who would rather claim the authorship of the *Lyra Innocentium*, than that of the magnificently embellished Elegy of Gray. To us the most noticeable defect in the *Lyra* is the want of a plan, which it seems might have pervaded the whole and sustained a natural connexion between the different periods of the Church's year and the various subjects treated of in the poems. The blemish may be insignificant, but if the grouping of the poems had been after a system somewhat similar to that of the *Christian Year*, we are persuaded that the book would have fixed itself more securely in the affections of a larger number of readers. In regard to the merits of the poems only, we are also persuaded that *The Red-breast in Church*, *David's Childhood*, *Church Bells*, *Looking Westward*, *Church Windows*, and *The Cross laid on Infants*, claim an equal praise with the better known verses of the *Christian Year*. The *Lyra*, like the *Christian Year*, contains one poem by a friend, to whom Keble acknowledges his indebtedness. No one who reads the beautiful verses entitled *The First Smile*, suggested by a passage in the *Confessions* of St. Augustine—*Post et ridere coepi; dormiens primo, deinde vigilans*—but will regret that Sir John Coleridge has not found leisure from the severe studies of the legal profession to cultivate talents which could give birth to such a gem. We cite a few stanzas:

'Tears from the birth the doom must be  
Of the sin-born—but wait awhile  
Young mother, and thine eye shall see  
The dawning of the first soft smile.

'It comes in slumber, gently steals  
O'er the fair cheek, as light on dew;  
Some inward joy that smile reveals;  
Sit by and muse; such dreams are true.

'Closed eyelids, limbs supine, and breath  
So still, you scarce can calm the doubt  
If life can be so like to death—  
'Tis life; but all of earth shut out.



'Tis perfect peace; yet, all the while,  
 O'er marble brow, and dimpled chin,  
 Mantles and glows that radiant smile,  
 Noting the spirit stirred within.

But did the smile disclose a dream  
 Of bliss that had been his before?  
 Was it from heaven's deep sea a gleam,  
 Not faded quite on earth's dim shore?

Or told some Angel from above  
 Of glories to be his at last,  
 The sunset, crowning hours of love—  
 His labours done—his perils past?

Blest smile!—so let me live my day,  
 That, when my latest sun shall set,  
 That smile, reviving once, may play,  
 And gild my dying features yet:

That smile to cheer the mourners round  
 With hope of human sins forgiven;  
 Token of earthly ties unbound,  
 Of heart intent on opening heaven.'

We had intended to quote more freely from Keble's poems, to analyse their diction, and to consider at greater length the matchless Christian beauty of the lessons which they teach. But having already extended our remarks, we fear, to too great length, we must conclude. That his poetry will occupy a permanent place in the literature of the English-speaking people, we confidently believe; and that it will be to our children, what it has been to us, we have little doubt—a teacher of new and spiritual relations in the world of nature, elevating the common things of daily life and making us feel more deeply, more truthfully, and more tenderly, of the world around us, and guiding our better thoughts to that other world, of which this is but the shadowy symbol. It will embalm his memory forever on the loveliest landscapes of old England, and attract the admiration of her children for ages to come. Our task is accomplished, and we take leave of our subject with feelings of

regret. The Church of All Saints, Hursley Vicarage and Church-yard, in fancy pass before us. The picture is as peaceful and as lovely as when the poet dwelt amid its tranquil scenes. Nothing mars the perfect loveliness of the landscape. Now and then, a wanderer from distant climes may be seen silently lingering near the grave where rests all that is mortal of John Keble. He looks around but to behold the memorials of the sainted dead; yet a more enduring monument to his genius and worth is rearing its stately walls at Oxford, and Keble College will perpetuate the memory of one of Oxford's greatest sons, and at the same time scatter its benefactions with no stinted hand on many yet unborn. Thus England will not willingly let the name of John Keble be forgotten.

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ART. IV.—*Elements of Geometry and Trigonometry*, from the Works of A. M. Legendre. By Charles Davies, LL. D. New York: A. S. Barnes & Co. 1866.

Innumerable are the works on Geometry, both by great and by little authors, from Euclid and Archimedes down to Davies and Loomis. Yet, having read many of these works, as well as reflected long on the wonderful history of the Science, we venture to add one more to the interminable list of manuals for the use of Schools and Colleges. The condition of the science seems indeed to demand such a work. The grounds or reasons which, in our opinion, justify the publication of a new work on Geometry, are set forth in the following paper, and in the *Notes* to which it so frequently refers. They are, however, little more than barely set forth in this article, (which is, in fact, the *Preface* to the forthcoming work,) while they are more fully discussed in the *Notes*. From this paper or *Preface* alone, the reader may, perhaps, derive the impression, that the



writer has, without acknowledgment, borrowed some important improvements in Geometry from his predecessors. If so, the *Notes* will dispel the impression, by giving to each and every author his due. With these remarks, we proceed to lay before our readers the *Preface* to the Geometry, which is now in press and will soon be published. It is as follows:

If any one imagines that Geometry has already attained to so great a degree of perfection, either with respect to its substance or to its form, as to call for no further improvement, he labors under a serious misapprehension. For Geometry is the work of man, and, like all the productions of the same finite and fallible being, the labor of centuries can only cause it to approximate more and more toward the standard of perfection, without ever once reaching that standard. The imperfections of Geometry are, indeed, the most painfully felt and the most freely acknowledged, by those who have the most profoundly studied its elements, and the philosophy by which its elements are pervaded. The truth is, that Geometry has, for more than two thousand years, been waiting to have certain things done for it, which the mathematical world has hitherto failed to do. I have, in the following treatise, endeavored to do some of these things, to supply some of these *desiderata*, and thereby contribute to the further progress of the science toward the standard of ideal perfection; with what success the reader must decide for himself.

In venturing to put my hand to so perilous a task, I have taken my stand on the best and most highly approved works, such as *Euclid* itself, the *Encyclopedia Metropolitana*, *Legendre*, Simpson's and Playfair's *Euclid*, the *Geometry* of Leslie and that of Simpson, as well as some others; refusing to depart from any of these guides, unless compelled to do so by the conflict of opinion which sometimes prevails among them, or else by what has seemed the inexorable demands of reason. No change has been made for its own sake, or from a childish love of novelty. Every innovation has, on the contrary, been the slow growth of time and patient meditation, as may be seen from the *Notes*, in which the grounds and reasons for it are fully discussed. How far these changes have removed the

imperfections of the science, or cleared up the dark spots on its radiant disc, thereby converting it,—from its first principles to its last results,—into a self-luminous and perfectly coherent system of concatenated thought, it is not for the author himself to determine.

The writers on Geometry are, as yet, far from agreeing among themselves with respect to ‘the first principles of the science.’ However strange it may seem, the first principles of the most certain of the sciences, i. e. of Geometry itself, are still a subject of doubt and controversy. Indeed, geometers are not agreed among themselves as to what constitute ‘the first principles of the science;’ some insisting that *axioms*, others that *definitions*, and a third class that *definitions and axioms* together, are the first principles of Geometry; or, in other words, the principles from which all its truths are deduced. Hence, the first thing to be done for Geometry is, to settle this controversy, to lay at rest forever this vexed question, by clearly and conclusively showing whether *axioms*, or *definitions*, or both together, constitute the first principles of the science. For certainly we cannot be said to understand Geometry as a science, unless we can tell the principles from which it takes its departure, or from which all its beautiful truths are deduced. Till this point be decided, indeed, the very first principles of Geometry, the fountain-head of the whole science, must remain involved in clouds and darkness, at least to human view. As thinking and rational beings certainly, if not as geometers, we desire to see the principles from which we set out, as well as the routes by which we travel, when we explore the fair regions of the science under consideration.

The most commonly-received opinion, that *axioms* are the first principles of Geometry, seems to have been the most negligently formed. Indeed, it seems to have formed itself in the unreflecting intelligence of man, rather than to have been formed therein by the inquiring and energetic exercise of reason. From the place occupied by the *axioms* at the beginning of the *Elements*, the notion has been carelessly taken up that they are the first principles of the science, upon whose acknowledged clearness and certainty the demonstrative evidence of its truths



depends. Locke gave a fatal blow to this negligent opinion. 'A man may,' says he, 'pore long enough on those axioms, without ever seeing one jot the more of mathematical truths.'<sup>1</sup> The character of axioms as barren truisms, having been proclaimed by Locke, they could no longer retain, with unsuspected acquiescence, their high and honorable position as the great prolific principles of the science. 'If this be granted,' adds Dugald Stewart, 'and if, at the same time, by the first principles of a science be meant those fundamental propositions from which its remoter truths are derived, the axioms cannot, with any consistency, be called the First Principles of Mathematics.'<sup>2</sup>

The opinion of Locke, that 'no science is, or has been, built on axioms,' is controverted by Dr. Reid. 'Surely,' says he, 'Mr. Locke was not ignorant of geometry, which hath been built upon maxims prefixed to the elements, as far back as we are able to trace it. But though they had not been prefixed, which was a matter of utility rather than necessity, yet it must be granted that every demonstration in geometry is grounded, either upon propositions formerly demonstrated, or upon self-evident principles.'<sup>3</sup> Again, he says, 'I take it to be certain, that whatever can by just reasoning be inferred from a principle that is necessary, must be a necessary truth. Thus, as the axioms in mathematics are necessary truths, so are all the conclusions drawn from them; that is, the whole body of the science.'<sup>4</sup>

Thus, he 'takes it to be certain,' he asserts 'it must be granted,' that the science of geometry is built on *axioms* as its fundamental or self-evident first principles. Never once does it enter into his imagination that anything but axioms could possibly constitute its first principles. Otherwise, a doubt might have taken the place of his dogmatism. Otherwise, he might have seen, as Dugald Stewart so clearly saw, that the self-evident first principles, or postulates, of geometry are not *axioms*, but *definitions*. 'From what principle,' says Stewart,

<sup>1</sup> Essay on Human Understanding, Book IV. chap. 12, sec. 15.

<sup>2</sup> Stewart's Works, Vol. II. p. 26.

<sup>3</sup> Essay on Intell. Powers, p. 647, 4to edition.

<sup>4</sup> Ibid., p. 577.

'are the various properties of the circle derived, but from the definition of a circle? From what principle the properties of the parabola or ellipse, but from the definitions of these curves? A similar observation may be extended to all the other theorems which the mathematician demonstrates.'<sup>5</sup> Now this appears to be the exact and unquestionable truth. The properties of the triangle, the circle, the parabola, and the ellipse, are deduced, and are deducible only, from the nature of these figures as given in their *definitions*. These, and these alone, are the first principles or postulates of the science of Geometry. 'It is this observation,' as Mr. Stewart says, ('which, obvious as it may seem, does not appear to have occurred in all its force either to Locke, to Reid, or to Campbell,) that furnishes, if I mistake not, the true explanation of the peculiarity already remarked in mathematical evidence.'<sup>6</sup> From the axioms of Geometry, such as, 'The whole is equal to the sum of the parts,' or, 'If equals be taken from equals, equals will remain,' how is it possible to deduce a single property of any one of the geometrical forms or figures? Is it not evident, that the properties of these forms or figures are implied in, and can only be deduced from, their several essential natures or definitions?

The opinion of D'Alembert, at once a profound thinker and philosopher, as well as a great mathematician, seems to coincide exactly with that of Locke. 'What then,' says he, 'are the truths which are entitled to have a place in the elements of philosophy? They are of two kinds; *those which form the head of each part of the chain*, and those which are found at the points where different branches of the chain unite together. Truths of the first kind are distinguished by this—that they do not depend on any other truths, and that they possess within themselves the whole grounds of their evidence. Some of my readers will be apt to suppose that I here mean to speak of *axioms*; but these are not the truths which I have at present in view. With respect to this last class of *principles*, (axioms,) I must refer to what I have elsewhere said of them; that, notwithstanding their truth, they add nothing to our information; and that the palpable evidence which accompanies them,

<sup>5</sup> Stewart's Works, Vol. II. p. 27.<sup>6</sup> Ibid., p. 27.



amounts to nothing more than to an expression of the same idea by means of two different terms. On such occasions, the mind only turns to no purpose about its own axis, without advancing forward a single step. Accordingly, *axioms* are so far from holding the highest rank in philosophy, that they scarcely deserve the distinction of being formally enunciated.<sup>7</sup> Hence, he says, 'it is not without reason that mathematicians consider *definitions* as *principles*; since it is on clear and precise definitions that our knowledge rests in these sciences, where our reasoning powers have the widest field for their exercise.'<sup>8</sup> Thus definitions, and not axioms, are the first principles of Geometry. These should, accordingly, always be as clear and precise as possible; since it is on their clearness and precision that the demonstrative certainty of the science depends. But as for the barren truisms called *axioms*, which only enable 'the mind to turn about its own axis,' they 'scarcely deserve the distinction of being formally enunciated.'

Mr. Stewart adopts, and expresses with admirable precision, the doctrine of Locke and D'Alembert. 'A process of logical reasoning,' says he, 'has been often likened to a chain supporting a weight. If this similitude be adopted, the *axioms* or *elemental truths* now mentioned, may be compared to the successive concatenations which connect the different links immediately with each other; the *principles* of our reasoning resemble the hook, or rather the beam, from which the whole is suspended.'<sup>9</sup> Thus, 'instead of comparing axioms with the *data*, on the accuracy of which that of our conclusion necessarily depends,' Mr. Stewart 'considers them as the *vincula* which give coherence to all the particular links of the chain; or, (to vary the metaphor,) as *component elements*, without which the faculty of reasoning is inconceivable and impossible.'<sup>10</sup> Each step is taken in conformity with an *axiom*, as a necessary condition of thought, but the point of departure, or first principle, is a *definition*. This is the beam from which the whole chain is suspended. *Axioms* are merely the *vincula* by which the several, successive, links are bound together in one indissoluble chain.

<sup>7</sup> Elém. de Phil., pp. 24, 25.

<sup>8</sup> Ibid., p. 4.

<sup>9</sup> Stewart's Works, Vol. II. p. 33.

<sup>10</sup> Ibid., p. 34.

Whether axioms occupy the position, and perform the functions, assigned to them by Mr. Stewart, it is beside my present purpose to inquire. I merely insist here, that he is right in regarding *definitions*, and not *axioms*, as the first principles, or postulates, of Geometry. Mr. Stewart, it is true, did not cause his doctrine to be universally received. This was the fault, however, not of the doctrine itself, but only of its advocate. For, becoming entangled in difficulties apparently too great for him, he breaks down in the middle of his 'high argument,' and virtually abandons the cause he had espoused. His analysis and discussion are, indeed, not sufficiently searching, exhaustive, and lucid, to satisfy his own mind completely, much less to carry conviction to the minds of his opponents. Hence, in a foot note, (p. 27,) he makes, 'in order to prevent cavil,' the following concession: 'When I speak of mathematical axioms, I have in view only such as are of the same description with the *first nine* of those which are prefixed to the Elements of Euclid.' Again, he says, (*Note A*, p. 358,) 'I must beg leave once more to remind my readers that, in denying *Axioms* to be the first principles of reasoning in mathematics, I restrict the meaning of that term to such as are analogous to the first seven in Euclid's list.' What, then, shall be said of the remainder of Euclid's axioms? Are these, after all, among the first principles of Geometry? If so, then it is no longer true, that *definitions*, and not *axioms*, are its first principles. Thus it is, that Mr. Stewart, in mid career, breaks down, and abandons the great truth, that *definitions*, and *definitions alone*, are the first principles of Geometry. He admits, after all, that only a certain class of axioms, are excluded from the high rank and office of first principles in Geometry; while, for aught he has to say, another class of axioms may occupy the same position, and perform the very same function, as definitions! How, then, do they differ from definitions? How shall we distinguish the one class of axioms from the other? How shall we distinguish those which 'are analogous to the *first nine*,' or '*the first seven*, of Euclid's list,' from those which are analogous to the remainder of his axioms.

The truth is, that until the dividing line between *definitions*



and *axioms* be more clearly drawn, and more firmly established on a scientific basis, it is idle, and worse than idle, to consider the question, whether the one or the other class of propositions constitute the first principles of Geometry. Inferences may be drawn, it is true, from propositions called *axioms*; but then the question is, whether they are really axioms, or only definitions in disguise?

Thus Euclid, for example, draws conclusions from the axiom, that 'two straight lines cannot enclose a space;' using this axiom, instead of his definition, in all his reasonings about the right line. But is this in reality an axiom, or a definition? The definition of Dr. Playfair, that 'if two lines are such that they cannot coincide in any two points, without coinciding altogether, each of them is a right line,' is certainly the same thing in substance as Euclid's axiom; for to say that two lines which coincide in part must coincide altogether, is to say that they 'cannot enclose a space.' Who shall tell us, then, whether Euclid's axiom is a definition, or Playfair's definition is an axiom? Perhaps a more careful and clear-sighted analysis will show us, that it is neither an axiom, nor a definition, but simply a corollary flowing directly from the definition of a straight line. Be this as it may, it is clear, that we still need some criterion, or test, to enable us to distinguish a definition from an axiom, and an axiom from a definition. For this is not the only instance, by a good deal, in which the axiom of one geometer, is the definition of another.

But what is the definition of a straight line? This, again, is one of the vexed questions of geometry. 'A straight line,' says Legendre, 'is the shortest distance from one point to another;' and the same definition is given in the *Encyclopædia Metropolitana*, as well as in other works of high repute. Yet this definition is, by authors of still greater renown, regarded as an axiom. Thus, after completing his list of definitions, Archimedes lays it down as an axiom, that 'a straight line is the shortest distance between two points.' Indeed none of the ancient geometers defined *straightness* by the circumstance of *shortness*; and when, or how, the axiom of Archimedes became the definition of modern geometers, the history of mathematics

does not inform us. Here, again, we need some certain criterion, or test, to enable us to distinguish between definitions and axioms, so as to place them one and all in their proper categories. Is there no such test? If not, then how do we know the difference between definitions and axioms, or presume to write them down under separate heads. But if there be such a test, or *differentia*, then why not apply it with uniform and severe precision, so as to shut out all this vacillation of view and variation of opinion in regard to the first principles of Geometry? It is evident, either that there is no such test, or that it has not been rigorously applied; and hence the elements of Geometry do not rest on a clearly and perfectly defined logical basis. Indeed, among the axioms prefixed to works on Geometry, there is usually an intermixture of definitions, corollaries from definitions, and even theorems, requiring to be proved; while, on the other hand, axioms, and corollaries flowing directly from definitions, are occasionally set forth as theorems to be demonstrated. To separate, define, and reduce these things to order, by the application of proper criteria or tests, is still an important *desideratum* in Geometry. In the following treatise, an attempt is made to supply this *desideratum*; and the grounds on which it is made, are set forth in the *Notes*.

In *Note C*, the reader may find, unless we are greatly mistaken, the criterion, or test, by which definitions may be distinguished from axioms, and axioms from definitions. This test shows, that after 'the first seven in Euclid's list,' his so-called axioms are merely definitions in disguise, or else deductions from definitions; a discovery which delivers us from the *tohu vav bohu* of Mr. Stewart's metaphysics, and reveals to us, in unclouded light, the great truth, that definitions, and definitions alone, are the first principles of Geometry. This great truth, once clearly possessed, settles the controversy as to the source of the certainty in the mathematics; showing that this certainty flows, not from the self-evidence of its axioms, but from the perfect clearness, and precision of its definitions. Hence, if we would promote the certainty of any branch of human science or knowledge, we must see to its *definitions*, and cease to trouble ourselves about its axioms or barren truisms.



In like manner, if we would remove the imperfections of Geometry, we must correct its definitions; for the most serious of its imperfections have, in fact, resulted from the faulty definitions of geometers. Three definitions, especially, require to be radically reformed, namely, those of the straight line, of the plane angle, and of parallel lines. The commonly received definitions of these figures, or forms, have, indeed, from Euclid down to the present day, introduced no little darkness, confusion, and controversy into a science, in which all should be perfect light, perfect order, and perfect certainty.

Euclid's definition of the straight line, as that which 'lies evenly between its two extreme points,' is notoriously and confessedly imperfect. It is, indeed, so imperfect and faulty, that he has not been able to use it at all in his reasonings, or to deduce from it any inferences whatever. This deficiency, in the list of his definitions, he supplied by the introduction of certain propositions, under the name of axioms, from which he could reason and draw conclusions. These propositions, however, are axioms in names only, and they supply the place of definitions, because they are definitions in reality, or else deductions from definitions. One of his axioms is, indeed, so clearly a theorem, that even Simson, in spite of all his veneration for Euclid, is compelled to regard it in its true light. The demonstration of this so-called axiom, occupies five pages in Simson's Euclid! (See *Notes D* and *E*, on 'The Straight line,' and on 'Parallel lines.') The definition of the straight line, set forth and used in the following work, dispenses with the necessity of the aforesaid misplaced propositions of Euclid, and, accordingly, they are expunged from the list of axioms.

The definition of the right line, that 'it is the shortest distance between two points,' is the one which most geometers have substituted for that of Euclid. But this also seems to be imperfect. It defines *absolute straightness*, not directly, but indirectly, and by means of *relative shortness*. But shortness is not straightness. In reality, when we say that a right line is the shortest distance between two points, we state a self-evident inference, or corollary, which flows from the nature, the idea, or the definition of a straight line. This corollary is,

indeed, sometimes given as an axiom, and sometimes as a definition, by geometers. It is neither; it is merely an inference, or corollary, from the definition of the straight line. (See *Note D.*)

The right line is, for reasons assigned in *Note D*, defined as one which 'has throughout the same direction with reference to one of its extremities.' The essential difference between the straight line and the curved line is, that the one always 'keeps the same direction,' and the other 'continually changes its direction at any part of its course.' Most persons will, no doubt, object to the above definition, that the term *direction* is no plainer than the word *straight*, which it aims to define. But this objection, however plausible at first view, proceeds on a radically false notion respecting the object or design of such a definition. (See *Note D.*) One might, indeed, just as well hold a candle up to the sun, as try to make the idea of straightness clearer, or plainer, by means of a definition. That, as is shown in *Note D*, is not the object of a definition of the right line; and the whole subject has, from time immemorial, been darkened by the fruitless attempt to render clearness itself still more clear by the use of words. The real object of the definition of a right line, as set forth in the note just referred to, is perfectly answered by the above definition; which, if it does clear up clearness itself, or the idea of a right line, clears up all the reasoning about that idea. Hence it is an element of light, and a beautifying element too, in the Elements of Geometry.

A plane angle is defined as 'the difference of direction between two straight lines;' still keeping to the idea of *direction*. Geometry has, indeed, been waiting two thousand years for the intelligent and systematic introduction of this idea into its elements. Its clarifying, its crystalizing power, will, it seems to me, become abundantly evident to the students of the following work. Especially will this be the case with respect to the doctrine of parallel lines, which has, from the time of Euclid down to the present day, been the reproach of Geometry.

It has always struck me with great force, that the theory of perpendicular lines should have always been so perfectly simple



and satisfactory, while that of parallel lines has always been attended with so much difficulty, doubt, and dissatisfaction; for there seems to be no reason, in the nature of things, why the one of these theories should be any more difficult than the other. What, then, has made the difference? Why has the doctrine of perpendicular lines always been so easily disposed of, and universally acquiesced in as perfect, while that of parallel lines has been a source of interminable objections and controversy? Guided by the principles laid down in the preceding pages, I have sought the solution of this question, in the definitions of perpendicular and of parallel lines. The idea of *direction* has been introduced, or rather it has always been used, in the definition of perpendicular lines, while it has never been employed in the definition of parallel ones. Has not this fact made all the difference in the two cases? And may not the theory of parallel lines be made as simple, as easy, and as satisfactory as that of perpendicular lines, by introducing the idea of direction into the definition of them?

The usual definition of parallel lines is certainly very imperfect. We are told, that 'they can never meet;' and it is by this negative circumstance, that they are characterized or defined. This definition tells us, not what parallel lines *are*, but only what they *cannot do*. We find it, of course, far more difficult to reason from a mere negative circumstance, than from a positive and fundamental property. Or, in other words, if we would ascertain all the properties of parallel lines, it is far better to set out from the positive idea or definition of parallelism itself, than from a negative circumstance resulting from that idea or definition. Hence, parallel lines should be defined as 'right lines, lying in the same plane, and having the same *direction* with respect to each other.' Perpendicular lines are defined as making a certain angle with each other, or as having a certain difference of direction with respect to each other. Parallel lines, in like manner, are properly defined as those which make no angle with each other, or have no difference of direction; or, positively, as those which 'have the same direction.' This definition has, in the following work, made the theory of parallel lines as perfectly simple, easy, and satisfactory as that of perpendicular lines itself.

If we examine the different editions of Legendre's Geometry, from the first to the fifteenth. we shall see that Davies has not

On page 385, line 2, for 'Davies' read he, (meaning Legendre.)

that neither he, nor any other geometer, will ever be able to construct a perfectly satisfactory theory of parallel lines, until a better definition of such lines be substituted for the old one. If, indeed, it had been possible, with the old definition, to construct such a theory, this would long since have been constructed and clearly established by the genius of geometers. The theory of parallel lines has, of late, more than ever before, been discussed in scientific journals, and given rise to a thousand and one controversies; not one of which seems to have shed a single ray of light on the subject. It was not an ingenious mathematician, or a logical head, or a powerful pen, which was needed to clear up the obscurities of the doctrine of parallel lines, and to set it in its true light forever; it was a new definition. Hence, if mathematicians will adhere to the old definition, then must they rest content with the doubts and difficulties of the old controversy.

It has long been the desire of geometers to find a short and easy substitute for the circuitous and tedious process of the *reductio ad absurdum*. It was for this purpose that Newton, as he tells us in his *Principia*, invented the method of limits. By most writers on the elements, or the makers of Geometry, in this country, the principles of the method of limits have been introduced into their works, with a view to simplify their demonstration. But, not having taken the pains to understand the principles of that method before they used them, their demonstrations are as unsound and illogical as they are short and easy. The truth of this remark is, in my *Philosophy of Mathematics*, fully illustrated and confirmed, with reference to most American works on Geometry, especially with reference to those of Dr. Davies. It is also illustrated and confirmed in *Note F*. In this work, as well as in my *Philosophy of Math-*



If we examine the different editions of Legendre's Geometry, from the first to the fifteenth, we shall see, that Davies has set forth several very different theories with respect to parallel lines; and, as it seems to me, the last is the least satisfactory of all. How long this will remain satisfactory to himself, or whether it has not already assumed some other form in a subsequent edition of his work, I do not know; but I venture to predict, that neither he, nor any other geometer, will ever be able to construct a perfectly satisfactory theory of parallel lines, until a better definition of such lines be substituted for the old one. If, indeed, it had been possible, with the old definition, to construct such a theory, this would long since have been constructed and clearly established by the genius of geometers. The theory of parallel lines has, of late, more than ever before, been discussed in scientific journals, and given rise to a thousand and one controversies; not one of which seems to have shed a single ray of light on the subject. It was not an ingenious mathematician, or a logical head, or a powerful pen, which was needed to clear up the obscurities of the doctrine of parallel lines, and to set it in its true light forever; it was a new definition. Hence, if mathematicians will adhere to the old definition, then must they rest content with the doubts and difficulties of the old controversy.

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*ematics*, the fundamental principle of the method of limits is demonstrated, and used instead of the *reductio ad absurdum*, in the construction of demonstrations which are as exact and rigorous in their logic, as they are clear, short, and easy in their processes. As this method has been the result of much research and reflection, and as it rests on a clearly demonstrated basis, so the reader need not look for a new method in every new edition of the work. It will never be changed.

The history of the science of Geometry reveals, to the thoughtful student of it, a certain tendency or vice of the mathematical mind, which should be carefully guarded against by every one who undertakes to teach the science. The tendency or vice, namely, which seeks to demonstrate what is, in and of itself, too evident to require proof or illustration. The history of Geometry is replete with instances of this vice or solecism. In one of the works of Euler,<sup>11</sup> for example, certainly one of the greatest geometers that ever lived, he labors through nearly a whole page to demonstrate a truth, which, even to the mind of a child, must appear as intuitively certain as any axiom in *Euclid*. That is, he labors to demonstrate, that a body, or material point, cannot pass along a line from one of its extremities to the other, without passing over its intermediate points! The schoolmen, as every one knows, debated the question, whether *a spirit* could pass from one point to another without passing over the intermediate space; a question which has long been considered rather too subtle, or too stupid, for any practical purpose. What, then, shall we say of the elaborate and profound demonstration of the proposition, that *a body*, or material substance, cannot move from point to point without passing over the intermediate space?

In like manner, Maclaurin, another great geometer, in his eager desire to remove all shadow of doubt from the foundation of the Method of Fluxions invented by Newton, has taken great pains to demonstrate a number of propositions, which are perfectly self-evident. The proposition, for example, that if two points start together, and always keep together, their velocities will be equal, seems as self-evident as anything can be. Yet has the great geometer taken no less than three or four

<sup>11</sup> His *Mechanica*.



quarto pages to demonstrate this self-evident proposition! In like manner, he has taken as many quarto pages to demonstrate the converse of the above proposition; or the proposition, that if two points start together, and move along the same line with equal velocities, they will keep together! If anything could darken such propositions, it is the absurd attempt to render them clearer, or more certain, by demonstration. It is, indeed, a serious injury to the mind, to be required to follow such long, prolix, and tedious demonstrations of perfectly self-evident truths. The *intuitional faculty of the reason*,—the great light God has given us to rule by day,—should be permitted to have fair play in the performance of its own appropriate function, and not be obscured by the improper use of the *reasoning process*. The saying of Dr. Barrow, that ‘logic was not made to put out our eyes with,’ is eminently true with respect to the eyesight of the mind, or the intuitional faculty of the pure reason.

In most works on Geometry, this faculty is, indeed, occasionally overlaid, and darkened, and oppressed, by the *reasoning faculty*, which, in its rage to prove everything, forgets that some things are infinitely clear without proof or demonstration. Even Euclid attempted to prove that one side of a triangle is shorter than the other two. His adversaries jeeringly said, ‘Any Ass can see that.’ He might have replied, ‘That is the reason you can see it.’ But, instead of this, he merely reminded them, that demonstrations are addressed to the mind, not to the eye. This reply was bad; for the truth in question is seen by the mind only, and not by the eye. There was, however, some excuse for Euclid, who did not define a right line to be the shortest distance between two points. But there is no excuse for those who first assume, as an axiom or a definition, that ‘a right line is the shortest distance from one point to another,’ and then attempt to prove that ‘one side of a triangle is shorter than the other two;’ for this is an attempt to prove, by means of the axiom or definition, the very theory therein assumed. In other words, it is an attempt to prove that, in the case of the triangle, a right line is the shortest distance between two points!

As little excuse is there for those geometers who, like

Legendre, to say nothing of Loomis, set out from the definition, that certain equal angles only are right angles, and then demonstrate, that all right angles are equal! who start from the postulate, that none but equal angles are right angles, and then demonstrate that all right angles are equal! Now cannot any one see, just as well without as with a demonstration, that the equal angles, called right angles, are all equal?

But these particular demonstrations of propositions, which, as intuitively certain, require no demonstration, constitute the smallest part of the defectiveness of most geometers. For many demonstrations, which are necessary to establish the theorems of the science, are rendered unnecessarily long, prolix, tedious, and obscure, by authors who do not sufficiently consider, or consult, the intuitional power of the mind. These demonstrations may, as I hope to show, be made much shorter than usual; and that, too, not only without a loss, but with a decided gain, in point of clearness, certainty and rigor. Or, in other words, by respecting and consulting, on all suitable occasions, the intuitions of the reason, I hope to dispense with a few demonstrations as altogether unnecessary, and to render many others shorter, clearer, and more satisfactory, than they are at present.

I shall, in conclusion, notice one other improvement, which the elements of Geometry have long seemed to stand in need of. In the eighth Book, which treats of the 'three round bodies,'—the cylinder, the cone, and the sphere,—we invariably encounter a number of *lemmas*, which are only necessary as auxiliary propositions to establish the beautiful theorems of that Book. They are merely the scaffolding, which is necessary to build up the beautiful science of 'the three round bodies;' but which, unfortunately, cannot be removed after the edifice is erected. I have found the means of dispensing with these *lemmas*, or unsightly appendages to the eighth Book of Geometry. Hence, in discussing the doctrine of 'the three round bodies,' the following work marches right on from theorem to theorem, without stopping to demonstrate any auxiliary proposition whatever, and without leaving the edifice disfigured by any such unnecessary and unsightly appendages.

Such are the main improvements, which have been attempted



in the following work ; or rather, which have gradually grown out of the studies of the author, as, for many years past, he has pored over the history and the science of Geometry. How far these improvements are real, or solid and satisfactory, he submits to the calm and impartial judgment of his mathematical readers. Knowing, however, how strange and unreasonable innovations, even the most necessary and valuable, are apt to appear to those with whose existing habits of thought they come in conflict, the author appeals, (if appeal be necessary,) from the decision of this to that of the next generation.

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ART. V.—1. *Luciani Samosatensis Opera.* Ex Recognitione. Caroli Jacobitz. Lipsiae. 1852.

2. *Ausgewählte Schriften des Lucian.* Erklärt von Julius Sommerbrodt. Berlin. 1853–1857.

3. *Art, 'Lucian.'* Preller, in Pauly's *Realencyclopädie.* Stuttgart. 1846.

4. *Zur Charakteristik Lucians und seiner Schriften (Gesammelte Abhandlungen.)* Von K. F. Hermann. Göttingen. 1849.

5. *Hellenismus und Christenthum.* Von Dr. H. Kellner. Köln. 1866.

One of Aristotle's most famous scholars put together a raft-like book, which he freighted with all manner of precious wares, with a cargo far more curious and costly than the gold and silver, ivory and apes and peacocks, that the navy of Tarshish brought once in three years to King Solomon. A few planks, a few scattered bales, have reached us, and with them the suggestive name of the lost vessel, 'The Life of Greece.' For, as the great master had arranged in a vast store-house the politics of the various Greek commonwealths, so the Disciple had en-

deavored to send down to after times an inventory of the riches of private life. Aristotle and Dicæarchus were alike administrators of a dead nationality. What Greece was to effect thereafter, it was to effect, not as a political, but as an intellectual and moral power. Such nationality as it had, held together just long enough to explode and ferment in the mass of barbaric peoples; and to him who watches narrowly the history of the world, that fermentation is not over yet. But the old 'life of Greece,' which those sages of the time of Alexander strove to preserve for us, was so highly organic, that we can better restore it in outline and in detail than that other life under Roman rule; and as few historians have deemed it worth their while to trace the Greek coloring of modern thought, so no one has succeeded yet in isolating the Greek current that mingled with the Oceanus of the Empire.

Of all the Greek writers of the Empire, Lucian presents the most fascinating problems to the student of history. Not Plutarch, the philosophic washerwoman of Chaeronea, not Antoninus, the introspective keeper of a pathological peepshow, gives us half so much to think about, gives us half so many glimpses of that world, which lived such a varied life, which moved under the impulse of such a complex of forces. But the very suggestiveness of Lucian, the very multiplicity of the figures of his canvas increases the difficulty of the study. How far is Lucian's picture of his times a portrait; how far is it a caricature? Were it not easier to find the mirror that will draw into a clear image all the blurs and blotches that we find elsewhere, than to determine how far these sharp lines of his have been distorted by perversity, how much these brilliant colors of his have been heightened by rhetorical art. But we do not set ourselves so hard, we had almost said, so impossible a task. Wider reading, deeper reflection, may hereafter lead us to more definite results; but as those results would, in all likelihood, be the outcome of other men's observation and other men's thoughts, we have preferred a more independent course—have read for ourselves, and judged for ourselves. It is true, that Barrow and Calamy were better preachers than Sir Roger de Coverley's chaplain; yet it might have been well for Sir



Roger to have deviated once in a while from his rule, and to have given the chaplain a chance to air his native crudities; and so it may be well, in this case, to shut up Jacob and Wieland for a while, and trust a far inferior guide.

If people had any gratitude, they would not forget their first introduction to a favorite author any more than their first introduction to the future wife or husband. Some insignificant tea-party, some insectiferous picnic often becomes invested or infested with portentous interest, when connected with a love-affair, while, for the most part, men remember their first reading of a pet writer much less vividly than their first assumption of a tail-coat or their first absorption of a sherry-cobbler. But, as Goethe has said somewhere, Ingratitude is a common fault in high-strung natures, and in claiming to be an exception to the observation just made, we are acknowledging to the baseness of the slave that pays a debt. Our first acquaintance with Lucian] dates back to an obsolete collection called the *Collectanea Graeca Minora*.

Now school books are things to be hated in after years by every well regulated mind; and every author of a school book is blessed just in proportion as he is cursed. Nor do we hesitate to say that we still cherish a mortal grudge against the little boy that roasted cockles, in the first fable of the *Collectanea*—still detest Palaephatus and his attempts to plane away the salient figures of Greek mythology, and still yawn at Hierocles and the scholastici, him who carried a brick with him as a specimen of his house, and him who lashed himself to the anchor in a storm. But from this sweeping censure we must except the dialogues, in the *Collectanea*, which first made Lucian known to us, and gave us the first relish for an author, so often mentioned and so little read by the great mass of literary people. Of course your true scholar reads Lucian; for, besides the insight which Lucian gives into the strange life of the second century, no author is so important as an expositor of the secrets of Hellenic diction. The Syrian barbarian learned his Greek; and as he did not learn it, parrot-like, by rote, but thought and analyzed before he combined, he who has eyes to see can gather many a lesson from the stone-cutter's appren-

tice. Even his deviations from Attic usage show that if he has erred he has erred on principle, and he never drops the clue of Greek thought. But while Lucian is especially interesting to the Greek scholar, there are but few of his pieces which are interesting only to the Greek scholar, such as the *Lexiphanes*, the *Solecist*, and the *Great Suit of Sigma against Tau*. Apart from these, there are not many ancient authors that retain for modern times so much of their essential oil; and Lucian's, we hope, will not be altogether evaporated in our transfusions.

Philostratus, the author of that strange romance—*Apollo-nius of Tyana*,<sup>1</sup> passed Lucian by in his *Lives of Eminent Professors*; why, we cannot tell; perhaps because he was greater than all their tribe. Slighted by his contemporaries, Lucian was treated still worse by posterity; for the later Christian centuries had no love nor mercy for a man whom they counted to be a contemner of their creed. So Suidas, the old dictionary-maker, calls him a blasphemer and a broken-down lawyer, sneers at the infinite number of his writings, rejoices in the report that he went to the dogs at last by dying of hydrophobia, and winds up his notice with the comforting reflection, that this arch-enemy of Christianity will be an heir of everlasting burnings, with Satan to bear him company. In these circumstances of neglect and hatred, our safest guide to the history of Lucian must be Lucian himself; and some of his pieces give us glimpses of his life and his training, which are of no little importance for the proper appreciation of his restless and varied activity. Of these pieces, *The Dream* is generally put at the beginning of Lucian's collected works, and has often been published separately as a school-book. It tells us that a family council was held over the lad just as he was emerging from boyhood. His father was poor, a higher education was expensive, and his uncle was ready to take him as an apprentice to the statuary's craft; and though it was not a gentlemanly profession, even in its highest branches, Lucian was not disinclined to the trade, and his imagination was busy with the little figures which he was going to make for his friends. And the boy had a genius for it, they said. Why, he used to make very

<sup>1</sup> See Southern Review for July, 1868.



nice cows and horses and men out of the wax which he scraped off his tablets; and thus the naughty trick for which his teacher had thrashed him, appeared at this crisis as the prophecy of future distinction. And although the distinction did not come in the expected direction, still it was not in vain that the boy moulded little figures in wax, for the arts are all interactive, and as Phidias copied his Zeus from Homer, so the later poets copied their Zeus from Phidias. It is not necessary that the writer be a *virtuoso* in painting or in sculpture; and Goethe is a notable warning against misdirected energies. But who shall say that Goethe's power of representation was not increased, and his perception of situation intensified, by his assiduous practice in drawing; and who can study Lucian's characters and Lucian's groups without recognizing the trained eye of the connoisseur, if not the skilful hand of the sculptor? But a sculptor Lucian was not to be. His first morning's experience disenchanted him. He broke a marble slab which he was set to chisel, and, as the Greeks would say, his uncle rubbed it into him soundly. That night he cried himself to sleep, and in a vision he saw Sculpture and Scholarship contending for him. Of course scholarship overcame; and at the close of the piece, Lucian congratulates himself on his choice, as he reflects how he left Samosata a poor boy; how he returned, to say the least, with no less reputation than any of the tribe of sculptors.

And thus the little Syrian boy of Samosata, on the far-off Euphrates, began a career as brilliant and as unsatisfactory as any in the annals of those times. His *Dream* was written in the first flush of his return to his native country. When that flush dies away, we shall have to listen to another story; and the rhetorician will revile rhetoric as sharply as the sculptor's apprentice denounced sculpture. Meanwhile we will review with him his course of life as a lawyer and as a lecturer in the masterly dialogue entitled *The Double Indictment*. Zeus opens this piece, which is one of Lucian's best, with a long complaint about the hard life the Immortals lead; and he, above all, as stage-manager and property-man of the Olympic Theatre. Especially does he grumble at the vast number of suits which have accumulated in heaven's chancery; for, what

with raining and hailing, thundering and lightening, watching the martial bustle in Babylon, and dining with the 'blameless Ethiopians,' he has not time to sleep, or to give himself up to the enjoyment of nectar and ambrosia; much less to hear the thousand-and-one quarrels of men. But Hermes tells him that the plaintiffs are importunate and must be despatched; and Zeus resigns himself to the discharge of his wearisome judicial functions—by proxy. Justice is sent to Athens to decide a number of cases, the last of which on the docket is that of a certain Syrian, in whom we recognize Lucian himself. The first accuser is Rhetoric. 'I picked up this fellow,' she says, 'a mere lad, a barbarian in language and a barbarian in dress, when he was knocking about Ionia and did not know what to do with himself. I took him and made a man of him. I had other lovers enough, rich and handsome and high-born. I left them all and married this poor, young obscurity. I brought him a fine dowry, and gave him the freedom of the republic of letters. I went with him wherever he wished to parade his lucky match—to Greece, to Ionia, to Italy, to Gaul. For a long time he was faithful, and never slept a night away from me; but when he got rich and prosperous, he took up with one Dialogue, reputed son of Madam Philosophy, and now he stays with him altogether. He has chopped up his fine, flowing sentences into short, comic questions. Instead of thundering applause, he prefers the nods and grins and the "hear, hear," of his auditors; and instead of being touched by my fidelity, he has no eyes for any one except his old billy-goat of a friend, whom, by the way, he is said to treat very badly. In view of all this, I charge this Syrian husband of mine with desertion and maltreatment; and if he dare answer let him answer, if he can, not with the art which I taught him, but according to the precepts of his beloved Dialogue.' In his reply, Lucian acknowledges all the past kindness of Rhetoric to him, but denies her fidelity. Instead of adhering to her native simplicity, and wearing the graceful, modest garb of the time of Demosthenes, she must needs play the fine lady, dress her hair after the fashion of the *lorettes* of the day, rub paint into her face, and blacken her lower eyelids. Lovers began to multiply. The



street was full of drunken suitors, and Madam, highly delighted with her popularity, would peep at them from the roof, or slip out to them through the door. However, with a due sense of her early love, he would not put her away openly, and was content to withdraw to the house of a quiet friend of his, one Dialogue. 'The fact is,' said he, 'I am forty years old and more. I am tired of the noise of the real courts, and the trouble of cajoling real juries. I am weary of tirades against fictitious tyrants and laudations of supposed heroes, and I want to spend the rest of my days in cosy chat with friend Dialogue in the groves of Academe or in the walks of the Lyceum.' Acquitted of this charge by an almost unanimous vote, Lucian finds himself confronted with a new and unexpected accuser. That very Dialogue, whom he had praised so highly, turned against him. Dialogue complains that Lucian had dragged him down from the lofty regions of the sky, in which he was wont to disport himself, and had forced him to act a comic part; had changed him from a soaring eagle to a comic hound; and with a peculiar malice, had left just enough of the original form to make people stare at the droll hybrid. To this, Lucian replies that all these changes have been so many improvements; that he had made Dialogue walk on earth like other reasonable folk, washed his dirty face, taught him to laugh, given him some popularity, suggested common-sense subjects for discussion, and, barbarian as he was, had not robbed him of the robe of Hellenic diction.

From this it appears that up to his fortieth year Lucian had devoted himself partly to the practice of law, partly to the display of his brilliant talents as a rhetorician and a lecturer. He had returned to his old home, prompted by a pardonable desire to dazzle the eyes of his fellow-citizens with his wealth and fame; and now we find him at enmity with his old profession, and glorying in a new career. Let us see whether we can fill up this gap. And first, we find among his papers his Farewell to Rhetoric, under the title of the *Complete Rhetorician*, a master-piece of irony. Now irony is but too apt to overreach itself; and no figure of rhetoric, when unsuccessful, is so utterly unsuccessful. Plain people cannot appreciate in the

depression of the *intaglio* the relief of the *cameo*, and we have often seen the most absurd embarrassments arise from the injudicious employment of this Socratic mode of illustration. The consolation one derives from the stupidity of the antagonist is cold comfort for the failure. Lucian's fun it may be possible to mistake at times, and grave editors shake their heads at sheer nonsense, which is simply meant to be sheer nonsense; but his irony is clear and cutting, and the *Complete Rhetorician* is perfect in its kind. In this tract he contrasts the laborious painstaking way in which he himself acquired the art, with the *Rhetoric in One Day* which so many pretenders professed to teach; and although we have lost some of the points, which were evidently directed against some particular enemy, the piece is barbed from beginning to end. And here we may mention in passing, a tract of similar tendency which probably belongs to the same period; and as we have called the *Complete Rhetorician* a master-piece of irony, so we see in the *Familiar Letter to an uneducated Bibliomaniac*, a most brilliant specimen of direct invective; and we recommend the study of both to those who can recognize the common features of this age and the age of the Antonines.

If the *Complete Rhetorician* is a Farewell to Rhetoric, the *Nigrinus* is a Greeting to Philosophy, and marks a turning-point in Lucian's career. In this dialogue he represents himself as having gone from Athens—where he had resided after his return from Samosata—to Rome, in order to consult an oculist. While there, he availed himself of the opportunity to visit Nigrinus, who opened the eye of his understanding, and caused the party-colored life of Rome to pass before him in review—a striking contrast to the simplicity of Athenian life—as he saw its pomp and its meanness, its luxury and its depravity. The author gives us no reason to complain of any lack of acute observation, of vivid coloring; but he is not yet master of the dialogue form. The continued *oratio obliqua* becomes fatiguing; and, if read after the other pieces of this period, the *Nigrinus* produces the effect of a table of contents to the richer embroidery of the same themes. Hence it is, perhaps, that Immanuel Bekker, with his fine critical sense, has



pronounced the piece spurious; a judgment which we can understand, but which we cannot accept. One thing in this dialogue deserves special notice for its psychological truth. Lucian speaks of his almost ecstatic emotion at the revelation of Nigrinus; and no religious enthusiast could have had more copious sweats, more faltering a tongue, more abundant tears. Then follow, in due succession, rapturous joy, spiritual elevation, tranquil happiness. The negative intoxicates as well as the positive; and many a man has felt as blissful when he was annihilating 'shams' and exploding 'wind-bags,' as if he had risen to a new life and were revelling in a new creation.

We have noticed Lucian's *Farewell to Rhetoric*. We have now to attend the closing-out sale of his philosophic studies, in the *Auction of Philosophers*. It was at best a slender stock, for Lucian's nature was pre-eminently artistic; and he had already appropriated all that he could work up—the critical attitude of the New Academy, the elegant scholarship of the Stoa, the grin of the Cynic, the fine observations of the Peripatetics, and the easy-going temperament of the Epicureans. What remained over was, in his eyes, mere refuse. In this *Auction of Philosophers*, Zeus is represented as selling off the head men of the various sects—all of them set in a row and nicely furbished up. Terms, liberal. Twelve months' credit, with good security. Most of the fun lies near enough—Pythagoras and his beans, Aristippus and his bottle, Chrysippus and his puzzles, Socrates and his ideas, whose absolute existence is conditioned by relative non-existence. But what is this the auctioneer says of Aristotle, 'If you buy him you will find out how long the gnat lives, to what depth the sea is lighted by the sun, and what sort of a soul oysters have'? So runs the world away. Too great a man for ancient or for modern times and standing astride of both, the pigmies of either side say that Aristotle has but one leg, because they can see but one. What music to the ear of Grote, the great vindicator of the sophists, to hear such a man called by that once opprobrious name.<sup>2</sup>

Close upon the heels of the *Auction* followed the *Fisherman*, or *The Resurrection*, which is also of some importance for the

<sup>2</sup> Dialog. Mort., 12: 3.

understanding of Lucian's history. The philosophers, indignant at having been sold, get permission to come to life again, and assail the sacrilegious mocker. The trial takes place on the Acropolis, at Athens. Philosophy herself is the presiding justice. Diogenes is the accuser. Lucian defends himself, and proves in the most satisfactory manner that his ridicule had been aimed, not at the great philosophers of the olden time, but at their degenerate representatives. Acquitted by a unanimous vote of the plaintiffs themselves, Lucian is declared their friend and benefactor, and is appointed Inspector-General of Philosophers. The title, *Fisherman*, is taken from the fishing scene, which closes the dialogue. Lucian borrows a fishing-line from the priestess of Athene, and, baiting the hook with gold and figs, draws up one after another of the philosophic *lazzaroni*, and submits these queer fish to the examination of the great thinkers, to whose sects they claim to belong. This piece, which must remind the English reader of Præd's famous poem, is one of Lucian's happiest in every sense—happiest in its artistic finish, happiest in its tone. He has renounced Philosophy, but he is not yet embittered against her. Although he has lost all faith in the results of thinking, he respects the thinker, and he is not very gouty yet. He can still be merry over any criticism, unless it attack his language; and when a reviewer calls him a literary Prometheus, he gives an honorable explanation of the title, and claims creative power for his art; although, as he says himself, less flattering interpretations suggest themselves at once, and, like Prometheus, he may have offered an unacceptable sacrifice—the mocking bones of comedy under the fat of philosophy; but in any case, unlike Prometheus, he was no thief. The poor thing was his own.

In his *Account of the Death of Peregrinus*, which must have been written after A. D. 165, Lucian's tone is perceptibly more bitter; but the *Hermotimus* is evidently intended to sum up his creed of unbelief and to justify it. The *Hermotimus* is one of the most Voltairian of Lucian's works; and, indeed, Lucian has been called the Voltaire of the second century. The ready wit, the sparkling style, and the negative polemic of both famous authors suggest a comparison; and yet the resemblance vanishes as we look more closely at the two. We miss in Voltaire that



fertility of fancy that fills the writings of Lucian with the most varied figures. With all their excellencies, *Candide*, *Zadig*, *Micromégas*, *L'Homme aux quarante Ecus*, are not Lucianic, and we are of those who think that it is far more just to compare Lucian with Rabelais than with Voltaire. The pictures which Rabelais draws of the sixteenth century are gigantesque, but they are Lucianic in their outline; only, instead of the subtle, life-like painting which we admire in Lucian, it is a vast and grotesque shadow that we see cast on the ample canvas of the joyous *curé* of Meudon. And then again the world is beginning to find out that there was far more of the positive in Voltaire than was popularly supposed, and Lucian's skepticism became at last a universal solvent, and a universal solvent it is in the *Hermotimus*. In this dialogue, Lucian's skepticism reaches its acme, and the blankness of his own nihilism seems to have affected the spirits of the great wit. Step by step he leads Hermotimus—who has been studying from forty to sixty and has not yet attained—until he brings him to the conviction that no proper choice of a philosophic sect can be made without going through all the systems critically, that no human life would be long enough for such a journey of inspection, and that after all it is but too likely that no existing sect has hit upon the right way. Nay, even if the seeker should attain the goal, the enjoyment of perfect virtue for the brief remnant of life were hardly worth the long and unremitting toil, unless, perhaps, there be another life beyond the present—a chance which Lucian sneers at. What philosophers call virtue, is a mere abstraction. Real virtue lies in virtuous action; and those wiseacres let the fruit of the tree of knowledge go, while they dispute about the bark, and pelt one another with the leaves. They are fighting the air, quarrelling about the ass's shadow, and pounding water with a pestle. Even the mathematicians, who deem themselves so secure within their magic circle, do not escape this skeptic. He laughs to scorn their line without breadth and their point without thickness; although he uses mathematics himself to show that correct deductions from false principles are as false as the principles themselves. 'If you say twice five is seven, it follows, as the night the day, that four times five is fourteen.'

It is to this period of partial and total skepticism, that most of Lucian's works belong. Of his earlier writings we have still some of his sophistic pleadings, his show-pieces. One of these speeches is called *The Disowned*. A young man who had been disowned and disinherited, studied medicine, and when his father went mad healed him, and in return for this service was restored to membership in the family. But his step-mother next went mad, and when he refused to heal her, he was again thrust out, and Lucian pleads his imaginary case. Another speech is entitled, *The Tyrannicide*, in which a man who slew the tyrant's son, and thus occasioned the suicide of the tyrant himself, claims the reward for liberating the people. For us moderns such themes as these, which men like Libanius labored over with painful art, have no more taste in them than the white of an egg; and it is painful to see Lucian returning in his old age to these beggarly elements. It is painful to see him commence a wandering life again—a melancholy spectacle, whether it was the thirst for fame or the need of money that drove the tottering actor on the stage once more. Again he recites and declaims; again the poor old jester makes faces before a public to whom he is nothing but an antiquity. The old wit flashes out every now and then, but his theatrical lightning is well nigh exhausted. The two pieces in verse, the *Tragedy of the Gout*, and *Nimble-foot*, if they are really his, show that he retained his versatility; and even when he was standing 'one foot in Charon's boat,' in expectancy of the summons over which he had made merry so often, he had strength enough to rap his antagonists over the knuckles with Charon's paddle. His last days were spent in Egypt in the enjoyment of a lucrative judicial position; but in his heart of hearts he felt himself a slave. The man who laughed at led philosophers became a led philosopher himself. Lucian died under Commodus—precisely when, we do not know; in any case at an advanced age, as his birth is set down in A. D. 120, under the reign of Hadrian. Nor do we know the manner of his death; for the dogs which Suidas sets on him, are purely mythical hounds, of the Cynic breed.<sup>3</sup>

<sup>3</sup>Comp. De Morte Peregr. 37. Nigrin. 38.



Before turning from the painter to his paintings, from the author to his writings, we must again remind the reader that the satiric element by no means exhausts the significance of Lucian. It was at first an honest indignation that made him a satirist—an honest contempt of the shams and unrealities and hypocrisies of the world. But he was an artist before he was a satirist, and he often forgets his satire over his art. In his picture of life and manners, the coloring and the attitude are often more to him than the moral; some of his pieces are almost wholly descriptive, some of them purely fantastic. Like his great model Aristophanes, he often writes with a purpose, but that purpose is fused into his work; and like his great model, he often writes without any purpose save the joyous exercise of genius. Any estimate of Lucian, which should leave out the *Imagines* with its exquisite plastic power of representation, or the *True Story* with its frolic grace, would give but a one-sided view of him. Of course the limits of our article preclude the possibility of analyzing all the works of Lucian—some eighty-two in number, genuine and spurious; but we shall endeavor to present at least some of his principal phases; and as we have mentioned the *True Story*, it may be as well to begin with that.

Let us first premise that the *True Story*—a *Veracious Narrative in Two Parts*—is a comic *sequela* to a brilliant essay entitled *How to write History*. After a long peace, the Romans had a real war, and the four years' struggle with Vologesus, which ended so brilliantly for the Roman arms in A. D. 165, called out a numberless horde of scribblers. The servile adulation, the utter disregard for truth, the want of true culture, of correct views of historical composition, so glaringly manifest in most of these would-be historians, provoked from Lucian this pasquil, which, in spite of its title, does not pretend to be an exhaustive treatment of the theme. Indeed an exhaustive treatment of so comprehensive a subject could hardly be expected from a writer of Lucian's impatient nature, and the first section of the essay, 'on the faults which are to be avoided,' is wrought out with much more spirit than the second, which sets forth 'the excellences that are to be sought after.' But

what grace is suffused over the whole! How he lights up his didactic discourse by apposite illustration, now drawn from the stage-struck Abderites, now from Diogenes trundling his jar—which moderns call his tub—at the siege of Corinth! What scorn he heaps on those who turn history into a panegyric, and depreciate conquest by depreciating the conquered! How playfully he reminds corporals and surgeons that their note-books are not annals! How he lashes the servile imitators—those who copy the phrases of Thucydides or the diction of Herodotus, and think that they are equal to Xenophon because they parody the opening of the *Anabasis*! How he ridicules the minute narration of details and the hasty dismissal of important events, the distorted geography, the incongruous language, half poetry, half slang, and above all how he abhors the sacrifice of historic truth to dramatic effect! How noble is the closing advice: ‘Write not merely for present praise and present honor, but write for all time to come, and seek your reward from posterity, that it may be said of you, Be it with others as it may, he was a free man and outspoken; no flattery nor servility in him; but in all circumstances the truth itself.’ Now the composition of this little treatise falls about the time when Lucian was engaged in earnest study; and as the *True Story* was confessedly undertaken as a relaxation from hard work, we think that the common arrangement, which puts it after the treatise on history, is sufficiently justified. In the *True Story* Lucian has anticipated Rabelais, Gulliver, and Munchausen, and so rapidly do the slides of his magic lantern follow one upon the other, that we seem now to be gazing at the Oriental world of the Thousand-and-One Nights, and now peering into the mistier recesses of German legend. To enjoy the show properly, it is far better for the reader to give himself up to this play of Lucian’s fancy than to endeavor to unriddle whatever satire of contemporary literature may lie concealed in its allegory—just as Rabelais is most enjoyable when his sense is so complicated with his nonsense as to defy the effort to draw either out entire. There may be profound meaning in the war which breaks out between the Sunburgers under Phaethon, and the Moonburgers under Endymion, which begins with the attempt of the Moon-



burgers to found a colony on the desert planet of Lucifer, and which ends with the victory of the Sunburgers, Lucifer being declared common property and the vanquished compelled to pay an annual tribute of ten thousand *amphoreis* of dew. But so elastic are all such allegories that they can be stretched to fit anything, and the war of these Heliots and Selenites would answer to describe the conflict between Orthodoxy and Rationalism, and Lucifer would stand for the coming man. But how much better to look with childlike interest on the marshalling of Horsevultures and Chickpeashooters and Garlickfighters and Flea-archers and Windrunners, and to watch the huge spiders spin their web from the moon to Lucifer. Nor do we trouble ourselves about the occult meaning of his Lychnopolis or Lamptown, which may have suggested to Rabelais his Pays de Lanternois and his Lychnobicus. It is a graceful conception, this town of lamps and lanterns of all sorts and sizes and conditions, hardly the Cloudeuckootown or Nephelococcygia of Aristophanes, 'a wise and truthful man,' says our author, 'whom people disbelieve on idle grounds.' After thus traversing uncritically the wonders of the air, we allow ourselves to be transported unquestioning to the chambers of the deep, and with the heroes of the story—Lucian and his men—we get ourselves swallowed by a whale—a creature 1,500 stades in length, in whose inward parts we find another world. It is a somewhat circumscribed world, but not uncomfortable, were it not for the warlike tribes that inhabit it, the Crabhands and the Tunnyheads and the rest of them, who must first be exterminated. By degrees we familiarize ourselves with our great prison, mark the quarters of the sky by head and tail, right gill, left gill, and mark the time by the hourly opening of the monster's mouth. We live there comfortably a year and eight months. But a jail is a jail, and we try to cut through the walls. After advancing five stades (a stade is 600 feet) we give this plan up, and resolve to kill the whale by setting the forests on fire. Seven days and seven nights the fire burns, and the monster takes no notice, gives no sign. The eighth day and the ninth he becomes uneasy. By the twelfth he is dying. As he opens his mouth we seize our chance to put a prop between

his jaws, in order to keep them from closing on us forever. Once out of the whale—why should anybody say it is Jonah's?—our ship's crew has a pleasant voyage, until a cold spell comes on, that freezes the water to the depth of four hundred fathoms. In no wise disconcerted by this, we dig a cavern in the ice and live on the fish embedded in the frozen ocean. When these provisions are exhausted, we rig up the ship and sail along the smooth surface until the ice melts. Passing by the Milk island, sacred to Galatea, (which is, being interpreted, Milcah,) and ruled by Tyro (Chester)—an evident thrust at etymologizing historians—and the Cork islands, whose denizens have feet of cork—we reach at last the Islands of the Blessed. Much of this scene is familiar from other sources, for the land of Cocagne is no novelty in literature. We have all smelt its odors and heard its music and breathed its fragrant air. We all know its golden capital with its emerald wall. Yet Lucian's fancy and, as some say, Lucian's reading of the Christians' books, have suggested new particulars. The ground is of ivory, the temples of beryl, the altars great amethysts. The bath-houses are of glass, the baths are heated with cinnamon wood. The soul is dressed in purple spider-webs, and wears a shadowy likeness of the body. There is no night there, neither light of the sun. The light is that of the morning twilight; there is but one season, spring; one wind, the zephyr. The grape-vines bear every month, bread grows already baked, and there are three hundred and sixty-five springs of water about the city, and as many of honey. In fact the island is as convenient as Charles Reade's island in *Foul Play*. Glass trees furnish cups, nightingales shower down flowers, clouds rain perfumery, and the two fountains of Laughter and Delight provide for the flow of soul. And now the satirist peeps out. The Epicureans and the followers of Aristippus are in high feather, but the Academicians are still in suspense, and the Stoics are still climbing the steep ascent of Virtue. Of especial interest is the interview with Homer, who declares that he is a Babylonian, that he composed all his spurious verses himself, that his critics are a pack of jolter-heads and simpletons, and that he commenced the *Iliad* with



the wrath of Achilles, because that was the first thing that came into his head. We are amused to see that the owlish gravity of some commentators can make nothing of this admirable fooling. The short stay of our party is richly diversified by a series of games, a pitched battle with the damned, and the elopement of Helen; and we are fain to linger, but Rhadamanthus is inexorable, and we are obliged to content ourselves with sailing directions and the good wishes of our hosts. As Helen remained faithful to her infidelity, so Ulysses is true to his adventurous nature, and as Lucian goes on board, the much enduring hero gives him a letter to Calypso—all unknown to Penelope, who had doubtless bestowed on her husband a new claim to his title. The Hell Islands, by which the mariners pass, are of the most orthodox type. The smell is of bitumen and sulphur and pitch, and a steam rises as of roasting sinners. The air is dark and misty, and the dew is pitch. Cliffs on every side; no tree, no water, anywhere on these Islands of the Accursed. The pavement of the prison had broken out into swords and stakes. Two streams run round the enclosure, one of liquid mud and one of gore; and through the middle of it flows a river of fire. Guides go about with the visitors, and name the culprits and their crimes. Of these, the most severely punished are the liars, among whom figure Ctesias and Herodotus. 'As I saw them,' says Lucian, 'I had good hope for the next world. I never told a lie.' Our party next land on the Island of Dreams, which is tricked out with poppy and mandragora, with bats, with gates of horn and of ivory, and all the other theatrical properties of sleep. At Ogygia, the abode of Calypso, we get a peep into Ulysses' letter, in which he tells his sweetheart, what we had long suspected, that he is very sorry for having left her, and only waits an opportunity to rejoin her. Calypso '*ne pouvait se consoler,*' as we all know, and after she has wiped her tears, questions the travellers straitly about Ulysses, and most straitly about his wife, whether indeed she was as chaste and fair as he had boasted; whereunto our unscrupulous travellers answer as they think would best please their hostess. But we have written enough to show that the *True Story* is a narrative well worthy of Doré's pencil,

and we will spare the reader the account of the naval combat between the Big Pumpkins and the Hardshells, the marvellous story of the Halcyon, which is first cousin to the Eastern Roc, the fights with the Oxheads, and the final adventure with those she-assassins, the She-ass-shins.<sup>4</sup>

The *Lie-fancier* (*Philopseudes*) has a deeper and a clearer meaning than the *True Story*. If it means anything, it means that philosophy does not save from superstition, and that men who play with lies, end by believing in them. In the introduction to the *Lie-fancier*, ample allowance is made for those falsehoods that have some useful end in view, and for those inventions that lend variety to poetry, or a lustre to the origin of princely houses or ancient cities. But what are we to say of the *Lie-fancier* pure and simple, who breeds lies as one breeds pigeons, and rejoices in every fresh monstrosity of pouter and tumbler? To exemplify this mania, we are presented to a group of philosophers, with Eucrates as their centre, a gouty old reprobate, who concealed a monkey nature under a flowing beard and a venerable mien. The talk is all of marvellous cures—of witchcraft—of magic rites. A sovereign remedy for the gout is the tooth of a shrew-mouse, wrapped in the fresh skin of a lion, and bound around the leg. A snake bite is cured by incantation—formula not given; and a story is told of a Babylonian enchanter, who not only healed his patient, but brought out of the field all the poisonous reptiles found within its borders. One old serpent did not come at first; but the magician sent a young snake after him, and he too came to be consumed, with the rest, by one breath of the potent wizard. Another of the company had seen an Hyperborean fly through the air, walk on the water, and pass through the fire; bring up the dead, bring down the moon, and bring in to a despairing lover a distant sweetheart. Among the great magicians is a Syrian professor from Palestine, famous for casting out devils; and ‘when he stands over the patient, as he lies on the ground, and asks the devil whence he came into the subject, the patient himself says never a word, but the devil replies, in Greek or barbaric tongue, as the case may be,



and then the magician brings his exorcisms to bear, and casts out the unclean spirit.' Of course this reminds every one of the Gospel narrative, but there is not the slightest reason to suppose that there is any allusion to that narrative. Syria<sup>5</sup> was a famous land for sorcerers and sorceresses, and this magician is represented as still extant. Next comes an account of the wonderful statue of Pelichnus, the Corinthian general, evidently a lineal ancestor of the commander in *Don Juan*; and then we have a Vision of Hecaté and the lower world, a dream and a warning of death. At this point the sons of Eucrates come in, and their entrance seems to remind the old gentleman of a prodigious lie: 'So help me God,' says he, 'as I will tell you the truth. You all know how I loved the sainted mother of these lads. I treated her well while she lived, and when she died I burned on her funeral pyre all her jewelry, all her favorite clothes. But on the seventh day, as I was consoling myself by reading Plato on the Immortality of the Soul, in came Demaeneta. I put my arms around her and began to weep. But she would not let me. "Why didn't you burn both of my gold sandals?" she asked. "I couldn't find but the one," I replied. "The other was lost." "I know that," she said; "it slipped down under the trunk." Was ever anything more exquisitely feminine? "Why didn't you burn it." "It was lost." "Why did you let it be lost, then?" Just then an importunate Maltese puppy began to bark, and the ghost disappeared.' The slipper was found and consumed, and the weary Demaeneta was no longer recalled to earth by her golden sandal, which had doubtless often done matronly service on the persons of the little Eucrateses. Of the other stories, the most remarkable is that of the Egyptian wizard, from whom his disciple caught the art of turning a broomstick or a pestle into a man, but, unluckily, did not learn the art of unmanning the pestle or the broomstick. But is not this the subject of Goethe's charming poem, *The Magician's 'Prentice*, (*Der Zauberlehrling*), and may we not read in his wonderful rhythm, how the transformed broomstick persists in bringing water after the bath is full, how the disciple in despair

<sup>5</sup> Dialog. Meretr., 4: 4.

cuts the broomstick in two, and how the master surprises the pupil watching from the depth of his watery wretchedness the hydraulic antics of the two imps he has made out of one?

This coquetry of philosophy with magic is all the more remarkable, because it is the preliminary of an important wedlock, the fusion of the Greek with the Oriental, the rise of that Neo-Platonic school, which may be called the Great Pagan Revival, with Plotinus, Porphyry, and Iamblichus, for its preachers, and Julian for its secular champion. To the same phase as the *Lie-fancier* belongs, in part, the romance entitled *Lucius, or The Enchanted Ass*, which is always printed with Lucian's works; but as its authorship is disputed, and its relation to the *Metamorphoses* of Apuleius is a matter of much debate, we reserve the whole subject for further study, and pass over to the next section of our present theme.

Among the figures of the crowded procession in the *Nigrinus*, no little prominence is given to the hireling philosopher;<sup>6</sup> and the miseries of the learned Greeks, who were employed about the persons of wealthy Romans, form the subject of one of Lucian's most elaborate treatises, which we have selected as a specimen picture out of his long gallery. *Graeculus esuriens*—we all know the rest. It is a lucky thing that we can see and hear the other side, and learn to temper with pity our contempt for the hungry Greekling. And Lucian might well claim to speak for the Greeks. There is scarcely anything Syrian about him, except his birthplace. Nay, he forgets so entirely that he is a Syrian, that he actually sneers at somebody's Syrian brogue. How thoroughly Greek he is appears very strikingly in the *Anacharsis*, in which he defends, under the person of Solon, the Greek view of gymnastics, against the attacks of the Scythian philosopher. But it is in the tract *De mercede conductis*, that his sensitiveness for Greek honor, for the honor of the people, as well as for the honor of the literary class, manifests itself in a way to do infinite credit to Lucian's heart. Luckily, the sketch has lost the pungency which it must have had for the family tutors and the Grub Street writers of the last century; but even now, that those two

<sup>6</sup> τῶν ἐπὶ μισθῷ φιλοσοφούντων.—Nigr. 25.



calamities of authors, 'the patron and the jail,' are alike overpast, the truthfulness of some of the features of the picture may still be verified by every day experience. Bad as domestic service is for any one—says Lucian, addressing a friend, who thinks of making an engagement—bad as domestic service is for any one, it is especially bad for the man of gentle birth and philosophical training. Lower professions may well serve as vessels of dishonor, but these are of finer clay, and are shivered under the weight of brutal insolence. And, after all the humiliation, the darling object is not gained by this voluntary servitude; the dreaded poverty is not avoided; and after years and years of endurance, the wretched self-deceiver finds himself a poor and needy hireling still. Nor is the life of one of these led philosophers the life of luxury which the novice dreams of, when his eyes are dazzled by the gold and silver of those princely houses, and his appetite is whetted by their rich viands and their costly wines. Ah me! thinks Lucian—the Lotus-eaters in Homer have more excuse, for they forgot the noble over the sweet, the *decorum* over the *dulce*; but imagine the stupendous folly of a fellow that stands starving away in utter forgetfulness for the pleasure of seeing another stuffing himself with lotus, himself without the hope of even a little taste. Count over your tenter-hooks. First comes the misery of making the acquaintance of the great man, the early *levers*, the pushing and shoving at the street door, the insolence of the porter, and the surliness of the Libyan usher, (nomenclator,) who has to be paid for remembering your name, the expense in dress out of all proportion to your means, the observance of your future patron's taste in colors, so as to avoid disagreeable contrasts—and all this that you may form part of his 'tail,' that he does not even deign to look at for many days together. And when at last he asks you a question, you break out into a profuse sweat, your head swims, you are shaking and quaking at the wrong time. And when you ought to say who was the greatest general of Queen Anne's day, you answer, she was the daughter of King James.<sup>7</sup> After long waiting, weary days

τίς ἦν ὁ βασιλεὺς τῶν Ἀχαιῶν, ὅτι χίλια νῆες ἦσαν αὐτοῖς.

and sleepless nights, you are presented and examined. Old fellow though you be, with a long beard and a gray pate, you are put through your paces for the amusement of the patron. Then there is diligent inquiry made into your previous life; and if you pass this severe ordeal successfully, and his lordship likes your style, and the lady of the house be willing, and the head servants have no objection, then you are taken into the retinue and invited to dinner. Upon the reception of this honor you must fee the servant that brings the invitation—a horribly large sum for an Athenian, five *drachmae* at least—and you must get yourself up elaborately, fearing all the while that you will get there either too early or too late, the one inelegant, the other vulgar. Everybody is watching you, the servants, the guests, the master. ‘Lord!’ says one, ‘he never dined anywhere in his life. A napkin is a novelty to him, and he drinks out of his finger-bowl.’ The host gives the attendants instruction to see whether you look round too often at the lady of the house, and then, to put your breeding to the test, he drinks your health. In your embarrassment you do not know what to answer, and all the other dependents, angry at this preference, unite in reviling you. ‘Eleventh-hour favorite! Rome is not open to anybody but Greeks. Did you ever see such an eater? or such a drinker? He never had his fill of white bread before, much less of pheasant! I should think not. He has left us nothing but the bones. Ah well! he is a new shoe. Wait till he is run down and twisted out of shape by the mud. He, too, will be a cast-away under the sofa, a prey to bugs and all manner of vermin.’ However, you are the cock of the walk just now, and may console yourself.<sup>s</sup> But you lose your balance. You drink too much and get into a bad way. It is not elegant to rise nor safe to remain, and you wait and wait—no eyes, no ears, for all the fine display the host is making. You wait and wait, praying for an earthquake, praying for a fire. We pass by the dreadful night and that awful state of indigestion for which the English language has

<sup>s</sup> *χρέσσων οἰκτῖρ μοῦ φθόνοϋ*.—Pindar.



no word, which only the Persian *Bidamagbuden*<sup>9</sup> can fitly express. Next day is scarcely better, for next day you must have the dreaded discussion of terms. Two or three friends are called in. 'Take a seat. You know how simply we live. We wish you to consider this house your home. But something definite must be determined on. You do not come to us to make money. "Good treatment is of more importance to you than pecuniary compensation." Just so. Fix your own price; but while you are fixing it, it may be as well for you to remember the perquisites of your position, the holiday-presents and the like, and I am sure you will be moderate. Cultivated people are above filthy lucre and, I am confident, we shall have no trouble.' As your patron goes on, your hopes crumble, your talents shrink to oboli, and your farm sinks into a quagmire. You half perceive the fellow's meanness, and yet you cannot but cling to some of his straw phrases.

Suchlike wetteth the lips, but never, ah! never, the palate.<sup>10</sup> For sheer shame you leave the matter of compensation to him. He in his turn leaves it to a friend, a hard-hearted old reprobate and a flatterer in grain. 'Lucky dog!' cries he, 'to have been received into the intimacy of such a family. Such an honor is more worth than all the talents of Cæsus, all the wealth of Midas. And to think that you are to be paid into the bargain. Well! well! If you are not an out and out spendthrift, I think that such and such an amount will be amply sufficient—' naming a sum out of all proportion to your soaring hopes. But it is too late; you are caught; you shut your eyes; the bit is in your mouth, and you give yourself up to the new control. Everybody sees that you are in the magic circle. Everybody congratulates you. 'For your part,' says Lucian, as many a newly-married man has said to himself, 'you can't see quite yet why people think you so happy,' and you feel as the proverb has it, that you are coming out of the

<sup>9</sup> Welch ein Zustand. Herr, so spät  
Schleichst du heut aus deiner Kammer  
Perser nennen's Bidamagbuden  
Deutsche sagen Katzenjammer.

Goethe, w. ö. Divan.

<sup>10</sup> χεῖλα μὲν τ' ἐδίηγ', ὑπερώην δ' οὐκ ἐδίηγεν.—II. XXII. 495.

little end of the horn.<sup>11</sup> Those golden hopes prove to be nothing but gilded bubbles; the hardships are real and grievous and implacable and unremitting; especially if you take into account the humiliation and the servility. From that moment you cease to be a gentleman, and leave freedom, family, ancestry, behind you. Unused to servitude, you are slow to learn how to obey, and the ghost of your lost liberty haunts you and makes you kick out of the traces at times. And yet a slave in all but the name, you hold out your hand every month, like other household drudges, and receive your monthly wages. And this is the fate that you have brought on yourself; and that at a period of life when, if you were a slave by birth, it were time to earn your freedom! You, the countryman of Plato, of Chrysippus, of Aristotle, pitting yourself against flatterers and vulgarians and buffoons; you, the only Greek in a crowd of Romans, miserably murdering the Emperor's Latin; you, a philosopher, joining in noisy banquets, in vulgar laudation, immoderate potation, and super-ridiculous saltation, what time the bell arouses you from your slumbers, and you have to shake off the sweetest corner of sleep's blanket, and run about with that delectable society, while yesterday's mud is still sticking to your legs. And all this for what? For delicate *entremets* which you never get, and wine of exquisite *bouquet* which you never taste! Nor are you to console yourself with the thought that your employment is a high one. Your patron cares for literature as much as the ass for the lyre, the cat for the fiddle, the cow for nutmegs. You have got a long beard, you have a reverend face, you wear your Grecian mantle becomingly, you are known as a literary gentleman, as a public lecturer, as a philosophic writer, and he keeps you as he keeps a monkey. You must trot about in his *suite* all day, you must stand on your legs without a morsel to eat or a mouthful to drink. You come to dinner after time, and ten chances to one you are pushed into a corner for a new arrival, and get a bone to gnaw or are fain to fill your belly with the garnishes of vanished dishes. No eggs for you, no fat capon to line your inner man withal; at most, half of a starveling chicken, or a

<sup>11</sup> ἐπὶ Μανδροβούλου χωρεῖ τὰ πράγματα.



tough old pigeon ; and even that is snatched from your hungry gaze if a stranger comes in ; and the foul fiend of a waiter whispers : ‘ You know you are one of the family.’ The other guests drink the old wine and you some wretched stuff, and yet you are ashamed to show how little prized you are ; and so you swig your villainous tippie out of a golden cup—such as it is and what there is of it—for even that is scant. Comes in some teller of improper tales, some singer of erotic songs. Good bye to you, philosophers. Go and bewail your fate. But, worst of all, you must needs stay and praise the favorites of your mistress, when they dance or strum on the guitar. Poor perspiring frog, you have to croak their praises from your dry-land perch, whilst your own throat is parched ; and then, should your master be the jealous lord of a pretty wife, you must keep a watch over your eyes, and make a covenant with them that they look not on maid or matron. What sad reflections come into your mind as you wake at cock-crow and review your fate, as you look up from the pit into which you have plunged yourself, and see the clear sky above you, and hear the whistling of the liberal breeze ! ‘ Is this my pay,’ you ask, ‘ for all my efforts ? And, worst of all, these efforts are abortive. I am a botcher at this trade. I am no boon companion, no fun-maker. If I stand on my dignity, I am a nuisance. If I stoop to wreath my face into smiles, I am, so to speak, spit upon. I am a comic actor in a tragic mask—and there’s the bell that calls me to the stage.’ So you go on from day to day, until at last your constitution is undermined and you gallop yourself into a consumption, sweat yourself into a pneumonia, or guzzle yourself into gout. When you accompany your owners into the country, there is never any room for you in the family carriage, but you are stuffed into a wagon with the cook or the hairdresser. And thank your stars if you do not fare as ill as did Thermopolis, the famous stoic. Madame la Duchesse wanted him to take charge of her Maltese pet. ‘ Dear little Florine, sweet little Florine,’ she cried, ‘ won’t you take care of my dear little, sweet little Florine ? The servants are *so* negligent. I can’t trust them. There’s a good old lovey of a Thermopolis. Bye, bye, Florine.’ Sweet little Florine sticks her muzzle out

from under the flowing beard of the philosopher. Dear little Florine licks off the relics of yesterday's soup from his moustache; and dear little, sweet little Florine, that had loved 'not wisely but too well,' shows herself as lively as the Hebrew women, and when the philosopher reaches the villa, he finds that his robe has become a cradle for Florine's pups.

As you become tamer, the demands become higher, and your talents are debased to buffoonery and flattery. And even if the claims of the men were endurable, the women are not to be borne, for some of them have the mania for being literary ladies, she-philosophers, poetesses; and, as such, keep a number of literary gentlemen, he-philosophers, and poets, in their train. But as their time is precious, they only lend their ears to you while they lend their hair to the curling-tongs, and, as it were, combine Cosmos with cosmetics, the glacial theory with ices, and stop a discourse on 'Virtue' to write a note appointing a rendezvous.

After a long time of watching and waiting, here comes a wretched coat or sleazy doublet as a present, and every member of the household makes you his compliment and insinuates the value of his services. Your wages are doled out a few pence at a time, and to get that you must fawn upon the master and be attentive to the steward; and then you have nothing to put up, for your pay is all overdue to the tailor, the doctor, and the cobbler. But by this time your master has stripped you of flower and fruit and foliage, of soul and mind and body. He has made a riddled rag of you, and looks for some convenient dunghill to cast you on. Some charge is trumped up, and you are hustled out head foremost at dead of night, your guerdon gout, your benison a potent paunch. Your faculties are gone, or, at all events, your reputation is lost. You are a Greek, and that makes against you, even if your enemy were to hold his peace. And no wonder, when you remember how many rascals of your race are roaming the world and hiding murder and incest and adultery under a fair outside, as books conceal beneath their gilding the story of a Thyestes, an Oedipus, a Tereus.

Behold now this picture of the life you are about to lead.



See those lofty gilded Propylaea. They are not built upon the level earth, but high up on a hill. The approach is steep and slippery. If your foot slides, you are gone. Within sits Plutus, all made of gold. There stands the lover, all amazement, as he stares at the brilliant metal. Fair-visaged Hope receives him—herself attired in dazzling raiment—and leads him onward, onward. Next, Fraud and Bondage take him, and pass him on to Toil, who works him well, and hands him over to Old Age. Hope flies away, and from some obscure back-door the poor old man is thrust out, naked and paunchy and ghastly pale, with his left hand for raiment and his right hand for a halter. Repentance meets him, and her weeping only hurries him on to ruin. Behold and be warned, and whatever you do, remember the saying of the wise man: God is not to be blamed; the blame lies with the chooser.<sup>12</sup>

Another picture, of surpassing power and living energy, is the *Banquet*, or the *Lapithae*; or, as we might translate the title freely, the *Kilkenny Philosophers*. In this piece Lucian spreads a feast, to which philosophers of the various sects are invited, and as the banquet advances, these sages come to loggerheads with one another, and display a truculence, a savagery, a superfluity of naughtiness and filthiness, which are indicated by the title of *Lapithae*. Well may the narrator draw the conclusion that there is no earthly use in scientific and philosophic attainments if the life is not harmonized by these higher principles to a nobler standard; and well may the student of history pause to reflect on the failure of all human systems to transform the nature. But Lucian's picture is too Teniers-like in its details for the pages of this REVIEW, and we must devote the rest of our space to some remarks on the Dialogues.

Of these, by far the best known are the *Dialogues of the Dead* and the *Dialogues of the Gods*—the former, especially, having been imitated scores of times, and both having been introduced into the cycle of school books. The Greek scholar of the present day need hardly be reminded that Lucian is not a proper author for school boys to learn Greek from. His use

<sup>12</sup> θεὸς ἀναίτιος αἰτία δὲ ἐλομένον.—Plato. Republ. X. 681, ε.

of the negatives varies so much from the classic standard, that even good Grecians seem puzzled to account for some of his deviations; and the teacher must give the boys vacation from many important distinctions, if he is to make any headway at all. The other particles are not always employed in conformity with Attic usage; the optative mood has too wide a range, and the compounds too often make us feel the composition; the parts do not grow together as in the native period of the language. But apart from these objections, which apply more or less to all of Lucian's works, these two sets of Dialogues hardly give a fair idea of Lucian's genius. *Charon on his Travels*, *Timon*, *Chanticleer*, are all better specimens. The canvas is larger, the characterization finer, the fancy more elastic, the moral more profound. *Chanticleer*, especially, is one of our favorites. For elegance of style, for vivacity of dialogue, for dramatic effectiveness, it is Lucian's master-piece. It is true that the springs of its movement have been borrowed for modern works, and we recognize at once our old friends the *Bachelor of Salamanca* and the *Devil on Two Sticks*; but such is Lucian's freshness, so lively and vigorous is the Greekdom of the piece, that we can hardly realize that we are reading a twice-told tale—when Micyllus the cobbler is conducted by Chanticleer, as the Bachelor by Asmodeus, behind the scenes of life. *Charon*, also, has peculiar merits. What happier conception than to bring the old fellow out for a holiday to the upper regions; and how well our author depicts the grim old waterman, as he begs Hermes to act as his guide, philosopher, and friend; and how delicately the line is drawn between the unconscious humor of the infernal ferryman and the more subtle playfulness of the Guide of Souls! This dramatic individuality of Lucian's characters is worthy of especial study. Diogenes and Menippus are both cynics, but Diogenes makes you feel that he is a man of authority; Menippus is as airy as Lucian himself. Other great artists had attempted the portrait of a Misanthrope, but none could have succeeded better than Lucian in his *Timon*. Doubtless he had ample materials for his study—materials which have been lost to us. But it is clear, from internal evidence, that Lucian stamped the



character anew. This Timon lived during the time of the Peloponnesian war, and built himself a sort of martello-tower, far from the habitations of men, and even in death had his resting place on a steep and solitary and almost inaccessible cliff. The chorus of women in the *Lysistrata* of Aristophanes says of him (in substance):

Timon was a restless creature,  
Bantling of the Furies born,  
And his face had every feature  
Girt about with hedge of thorn.  
Carried off by hatred Timon  
Did a lonely tower climb on,  
Whence he cursed with breath unabated  
All the rascals that he hated.  
Hated men—but, be it noted,  
To the girls he was devoted.

In the *Birds*, Prometheus says:

I hate the gods—each mother's son of them, you know  
I am a perfect Timon pure.

The *Odd-fellow* of the comic poet Phrynichus says:

I lead a Timon's life—  
No wife, no servant, verjuiced, unapproachable;  
I laugh not, talk not, cork myself within myself.

Antiphanes, one of the chiefs of the Middle comedy, made this eccentric misanthrope the hero of one of his numerous pieces; but it was reserved for Lucian to transmit the type to modern times—for modern times to misunderstand the type transmitted. Your misanthrope is never himself a faultless character; his hatred is an inverted love of self; his morality is pharisaical. This man Timon lived during the Peloponnesian war, and never felt it. He never bore his portion of the burden of the State; he never shed a drop of blood for his country; and not insignificant is the hint which Aristophanes gives us that his virtuous indignation was levelled exclusively at the male sex. Now, while Lucian employed Timon as a catapult to shoot at the follies and frailties of the times, he did not neglect the accurate draught of the engine that he employed,

and bestowed special pains on the elaboration of Timon's character. Whether Shakspeare made any use of Lucian's Timon, we shall let Shakspeare scholars discuss; but certain it is, that between the Timon of Lucian and the Timon of Shakspeare there is almost as wide an interval in character as in time.

In order to understand properly the *Dialogues of the Gods*, the *Marine Dialogues*, the *Dialogues of the Dead*, and the *Hetaeric Dialogues*, we must regard them as so many studies of form. He who should suppose the antique epigram to resemble the modern, would be disappointed at the absence of point and piquancy in a large proportion of the epigrams of the Greek Anthology; he who should look for nothing but irony and satire in these dialogues of Lucian, would be puzzled to find irony or satire in many of them. Not a few resist analysis. Complete and rounded they are, but complete and rounded as is the soap bubble, and, like the soap bubble, they mirror for a moment sky, and sea, and earth, and then vanish in an iridescent collapse. Not a few seem to have been composed merely for plastic effect—merely to show a rare power of representation—and so belong to the same class as the *Imagines* of our author and the *Imagines* of Philostratus. So the dialogue between Aphrodité and Selené, (*D. D.* 12,) exists simply for the figure of Endymion 'sleeping on a rock, with his chlamys under him; in his left hand holding his javelins, which are just gliding out of his grasp, while his right, bent above his head, forms a becoming frame to his face, and, all dissolved by sleep, he breathes his ambrosial breath.' So the main thing in the dialogue between Aphrodité and Eros, (*D. D.* 12,) is the animated description of the procession of *Magna Mater*, with Cupid mounting her lions, catching hold of their manes, and putting his head in their mouths. So the twentieth dialogue merely serves to frame the picture of Ganymede carried off by Zeus. It is true that Lucian loves to get human fun out of the legends of the gods. So Aphrodité spans Eros as Xanthippe spanked Lamprocles. So Hera—a celestial Mrs. Caudle—accounts for the excessive lenity which Zeus shows toward Ixion, by his former intimacy with Ixion's wife; and



the same jealous goddess displays an exquisite malice when, vexed at Latona's boasting of her children, she says that Apollo overcame Marsyas by fraud, and that Artemis set her dogs on Actaeon to keep him from telling how ugly she was. But there is really no more harm in this than in Homer. Lucian's Zeus, his Hera, his Hephaestus, are miniature reproductions of the figures in the great frieze of the Epic, and if the mellow light of the Homeric sun has faded into white, the light is a steady one, and the noble features of the old mythology are not distorted. In this regard, Lucian is pre-eminently Greek, and not Syrian; for herein we see a wide difference between Hellenic and Semitic. What strikes us as peculiar in the relation of the Greek to his gods is, its immediateness. It was hard to convince the Hebrews that God was a god that was near. It would have been hard to convince the Greek that his gods were gods that were afar off. He gazed into the face of Zeus, the Prince of the Power of the Ether. He laid his hand on the mane of Poseidon's horses. He looked into the blue eye of Pallas, or watched the glancing of her lightning spear. His gods lead him an easy life, and their joyousness pervades all who approach them. Call this frivolous, if you choose, but it is undeniably national, and the irreverence of Lucian—in the earlier stage—is not to be compared with the irreverence of Voltaire. The sportive treatment of mythology would have been no evidence of unbelief to the countrymen of Homer and Aristophanes, to the students of the Satyr-drama, to the readers of the Middle Comedy. Far different is the case with some of the later dialogues of Lucian—with *Zeus Cross-examined*, and *Zeus Stage-struck*—in which Cynicism and Epicureanism alike issue in blank Atheism.

The *Dialogues of the Dead* seem to belong to a more advanced stage of study than the *Dialogues of the Gods*, although they do not reach the artistic height of the *Chanticleer* or of the *Double Indictment*. They form a comedy of human life, not unlike the Mediaeval Dance of Death—for in Lucian's time Death was no longer the brother of sleep, but a grim and ghastly skeleton; and an interpreter of the show, Diogenes or Menippus, appears in more than half the pieces, to point the

moral with the bony finger of scorn. The text is *Vanitas Vanitatum*, with Charon's boat for a pulpit, and a cynic for a preacher. The theme is announced in the very first dialogue, in which the rich, the great, the wise, the strong, are to be taught how brief and how slender is the tenure of their advantages. Not a little remarkable, as characteristic of the Graeco-Roman world, is the large proportion of pieces which set forth the miseries and disappointments of legacy hunters. The aversion to philosophy and philosophers is evident enough, but the hostility is not as bitter as in the *Lapithae*, and the despairing contempt not as profound as in *Hermotimus*. He makes Pythagoras beg for beans, represents Socrates as making a prodigious ado as he goes down to Hades, and gives a full length portraiture of a philosopher in the longest of the dialogues, which is absurdly like one of Bunyan's allegories. But those of our readers who know Lucian well, know the *Dialogues of the Dead*, and we cannot stop to analyze. Those who do not know Lucian, may be entertained by some specimens of his grim humor, taken at random from these and other works of his. When Menippus goes down to the dead, he asks for Socrates. 'You see that bald pate,' says his guide. 'They are all bald pates.' 'I mean that fellow with the flat nose.' 'They have all flat noses,' replies the Cynic. Charon builds rafts to take the extra passengers over, in Alexander's time, and talks contemptuously of the green ghosts of babies. Often the sententious brevity reminds us of Shakspeare. 'This skull is Helen,' recalls to our mind the grave-digger's scene in Hamlet; and when Hermes says to Prometheus, 'Mount up now, like a good fellow, and have yourself nailed to the mountain'—we seem to hear the clown saying to Barnardine, 'You must be so good, sir, to rise and be put to death.' Almost too ghastly for fun, is the passage in which Menippus says that his death is not unnoticed, 'the dogs are howling piteously over him, and the ravens are beating their breasts with their wings, as they come together to bury him.' Some of Lucian's fancies are so weird that we seem to be standing upon the German Brocken, and not upon the Greek Helicon; and his images are often as grotesque as any of the gargoyles that spit their spite from the



roofs of mediaeval churches. Peter Schlemihl, or the man without a shadow, even if the idea were entirely original—and it is not, for Dante's friend Virgil casts no shadow—is not a more striking fancy than Lucian's notion that our shadows, when we die, tell on us before the high court of Hades; credible witnesses they, and well-informed. Nor is this play of the imagination without its deeper meaning; as, where he speaks of the invisible brands of vice, invisible here, but blazing out in the lower world; as, where he tells us that the bed and the lamp are called to bear witness to the crimes of Megapenthes, whose punishment is the remembrance of his sins.

The *Hetaeric Dialogues*, or *Colloquies of She-fellows*, are not in use as a school book—for manifest reasons; and it may, perhaps, be best to pass them by in decorous silence. Like the rest of Lucian's dialogues, they are full of keen wit, of sly humor, of droll situations, of vivid pictures. But those of our younger readers, that press forward toward the forbidden, would be very much disappointed in them. There is hardly one halfpennyworth of indecency to an intolerable deal of cleverness. To the man of thought and experience, they are sad reading—as sad, we say it gravely, as Defoe's *Moll Flanders*. We see worldly wisdom, or rather, hellish cunning, warring against the better instincts of maidenly nature. We see the pure flower of true love peeping forth shyly from amid the rank luxuriance of sensual indulgence. Jealousy, without which, says one of the heroines, there can be nothing but a surface love, throws its lurid light over these miniature pictures, and there is no lack of lovers' quarrels, of tempestuous scenes, of sorcery and witchcraft. Our old friend, the Pyrgopolinices of Plantus, turns up under a new name, and admirable is the dialogue in which one of these swaggering soldiers tries to excite the admiration of his lady-love by the recital of his bloody exploits—puts her to flight instead, and, in order to win her back, is forced to send a messenger to tell her that it was all a lie. But we do not purpose to detain our readers in the neighborhood of 'Kisskin (Philemation) the Coffin, otherwise called Mantrap,' and her sisters. Grave as the subject is, there is one still graver before us, which we must discuss before we close this study.

We have already seen that the mocking genius of Lucian had called down on him the unmeasured wrath of Christian grammarians. In vain they might have been told that Lucian's shafts were directed against nonentities. Their Ens was the legitimate successor of these heathen nonentities, and he who had been disloyal to one set of masters, would have been disloyal to the true monarch. It must have been the utter want of veneration, the utter *nihilism* of the still-denying spirit—*der Geist der stets verneint*—that offended them so; for, apart from the confessedly spurious dialogue, *Philopatris*, there is really no formal opposition in Lucian to the Christian religion. Lucian floats with the current of disintegration; he has no sympathy with any attempt to restore the old faith. Philostratus gives an apotheosis of Apollonius of Tyana. Lucian delights in holding up to the contempt of all sober minded men the false prophet Alexander, a successor of the famous Tyanite. Lucian wanted a heathen ideal as little as he understood the reality of the Christian faith. To him the Christian religion was but one of the strange elements let loose in the breaking up of the fountains of the great deep; and the lively satirist of the second century, and the saturnine historian of the first, alike failed to recognise the Saviour of the world in the man, whom they called 'one Christus,' 'a sophist.' It is only in a sketch of Alexander, and in a remarkable account of the death of Peregrinus, that Lucian makes any direct mention of the Christian religion. We have already noticed, what some have considered an allusion to the Gospel, in the *Lie-fancier*, and a striking resemblance to the Heavenly City of the Apocalypse, in the description of the Island of the Blessed, in the *True Story*. But both of these allusions, the former perhaps more readily than the latter, may be otherwise accounted for; and we must look to the passages in *Alexander* and in *Peregrinus* for Lucian's views. The *Alexander* is a vivid portraiture of the miracle mongers and oracle peddlers of the age, and had we not already outrun the lines of our sketch, we should be tempted to give the reader at least a glimpse of the imposter's life. The great field of Alexander's operations was Cappadocia, the inhabitants of which were noted for their laziness and



stupidity.<sup>13</sup> As Cappadocia was one of the foci of early Christianity, some apologists have thought it worth their while to defend the character of the Cappadocians, and at least one of them has done Ireland the gross injustice of comparing her people with those imperfect Christians. Yet, very much to the credit of those imperfect Christians, we learn that Alexander found them a serious stumbling-block in the way of his success, and classed them with the Epicureans in his ukase against the skeptics; and that he was wont to open prayers by saying, 'Out with the Christians!' And all the people answered, 'Out with the Epicureans!' Somewhat inconsistent with this wise incredulity, is the character given to the Christians in the *Death of Peregrinus*, one of the most curious documents of that age. This Peregrinus Proteus, who burned himself alive at the Olympic games in A. D. 165—Lucian being present—had been a Christian before he became a Cynic. After strangling his father, he ran away from his Armenian home, and learned in Palestine the strange wisdom of the Christians from their priests and scribes. In a short time they were all children to him. He was their prophet, the manager of their feasts, the chief of their assemblies, and their all in all. Some of their books he interpreted and expounded; many of them he composed; and they looked up to him as a god and obeyed him as a law-giver and inscribed his name on their records as their president. These people, by the way, adore that great personage that was crucified in Palestine for introducing this new worship into the world. On the charge of adhering to this sect, Peregrinus was arrested and thrown into jail, a circumstance that of itself was of no small service in helping on his marvel-mongery and his itching for notoriety. When he was put in prison, the Christians took the matter very much to heart, and tried every means to get him out; and when this proved to be impossible, they showed him all manner of attention. Early in the morning, you might have seen old women and widows and orphan children waiting outside of the jail, and the church officers bribed the jailors to let them sleep inside with the prisoner. All kinds of food were taken in to

<sup>13</sup> Southern Review, January, 1868.—Art. *The Emperor Julian*.

systems of faith and philosophy are dropping to pieces. New combinations are forming. The 'activity' of those 'unfortunates,' the Christians, is becoming not only 'extraordinary' but portentous. A great struggle is preparing. Lucian has swept the arena.

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ART. VI.—1. *Preliminary Report on the Eighth Census*, 1860.

By Jos. C. G. Kennedy, Superintendent. Washington: Government Printing Office. 1862.

2. *Message from the President of the United States to the two Houses of Congress*, at the Commencement of the Second Session of the Thirty-eighth Congress; with the Reports of the Heads of Departments, and Selections from accompanying Documents. Washington: Government Printing Office. 1864.

The ability of a people for military exploits depends, in modern times, upon two classes of circumstances, the material and the moral. Among the former, the most important are, the numbers of its population, the magnitude of its revenues, its manufactures, commerce, and agriculture, and its geographical position. The moral qualities which make a military nation are, natural bravery, love of glory, intelligence, independence, fortitude, and, above all, virtue and devout religious faith.

The authors and politicians of the North usually point, with much exultation, to the war against the Confederate States, which closed in 1865, as a splendid proof of their military prowess. Since that triumph, it has been customary with them to claim that the United States stand in the first rank, if not at the head of the great military powers of Christendom; and that they may safely venture to cope with the greatest of those powers. That war is supposed to prove that the United States are able,



with ease, to place a million of combatants in the field, and a powerful navy upon the water, for any contest which affects the national heart. We propose to bring this boast to the test, by a review of some facts and figures, touching the parties to the recent war. We hope thus to reach a correct estimate of the real material resources of the United States for a great war, at this time, and of the aptitude which the Northern people have disclosed for military enterprises.

The first consideration is obviously a comparison of the population and production of the two parties to the late contest. According to the census of 1860, (the year before the contest began,) as prepared by the North itself, the Northern States and territories had then a population of twenty-two million eight hundred and seventy-seven thousand (22,877,000.) This aggregate includes a few hundreds of thousands of negroes, but none of the Indian tribes. The Confederate States had a population of eight million seven hundred and thirty-three thousand (8,733,000.) But of these, three million six hundred and sixty-four thousand (3,664,000) were negroes; so that if they are deducted, we have only five million (5,000,000) whites to sustain the struggle against twenty-two million, (22,000,000.) Northern politicians are bound to admit the fairness of at least such a deduction; because they uniformly say that slavery is a weakening institution, inimical to national strength. We, indeed, always argued (what this war abundantly confirmed) that a slave-holding nation was stronger for war than a hired-labor State, of numbers equal to the free and slave together; because the devotion of the bondmen to productive labor both released a larger number of freemen for military employments, and gave them a higher tone. But the Northern statesman cannot use this plea; because he has always denied these facts, and asserted the contrary. He is therefore obliged to count out the Southern slaves, and to compare the belligerents as five million (5,000,000) against twenty-two million (22,000,000.) He is obliged, also, to estimate these five million (5,000,000) as a people far inferior to the rest of Christendom, in their *morale*; for has he not proved to his own satisfaction, in his descants on the 'barbarism of slavery,' that this

institution invariably renders the masters lazy, effeminate, selfish, petulant, and insubordinate? The case which we have to inspect is, therefore, for the North, this: that twenty-two millions (22,000,000) of the best people in Christendom managed somehow to beat five millions (5,000,000) of the meanest.

In this estimate of numbers, we have not counted Kentucky or Missouri as Confederate States. Both parties claimed them; the North actually possessed them, during the whole war, with their territories, resources, and population. A few thousand from each State preferred exile to subjugation, and enlisted in the Confederate armies. These, with the recruits from Maryland, were far more than counterbalanced by the large defections from the Confederate cause in East Tennessee, Northern Arkansas, Western North Carolina, and North-Western Virginia.

But we have not yet reached the fair comparison of material strength. The campaigns of 1861 were only tentative; the real 'tug of war' had not yet come. But before May, 1862, the Northern armies were in permanent occupancy of all Western and Middle Tennessee, of nearly the whole of Louisiana, of parts of Florida, of the coast of South and North Carolina, of Eastern and Northern Virginia. This occupation continued until the end of the war. The population thus excluded from the support of the Confederate cause cannot be exactly estimated; but it was certainly more than twelve hundred thousand (1,200,000.) Thus the Confederates bore all the real brunt of the struggle, with three million eight hundred thousand (3,800,000) white people. The fighting men were not absolutely limited to this source, for some of them came from within the hostile lines; but, of course, no material resources, and few men, could be relied on from a territory in the permanent occupancy of the enemy. The real problem which was solved, then, was, how twenty-two million (22,000,000) of the best people in Christendom managed, in three years, to beat three million eight hundred thousand (3,800,000) of the meanest.

But the material resources were even more unequal than the numbers. The Confederate States were rather planting than



agricultural communities; their customary industry produced rather those things which are the basis of Northern commerce, than the wheat, the beef, the wool, the horses, which sustain large armies. The North had far the larger portion of the commerce and manufacturing arts. It retained the national army, navy, arsenals, treasury, government. The South had all these to create, in the progress of the struggle.

But, *secondly*, it is pleaded that a people inhabiting a large country, have, in their forests, rivers, mountains, and especially in the distances which armies must pass over, a defence against the invader, which almost compensates for any inferiority of force. This argument was not true, in the case of the Confederate people. New circumstances, with their geographical position, wholly neutralized these advantages. Of these, one was the advantage which the invader had of railroads; by which he almost annihilated distance, and overcame weight and bulk, in transporting the *materiel* of war. The Confederate States were sufficiently supplied with railroads for all the military purposes of the invader. Retreating armies usually attempted, of course, to dismantle these roads; but the repair of any damage thus hastily done, was easy and quick work to a numerous people, abounding in industrious mechanics, and in machinery and materials. Thus, as an invading army was enabled by its military successes to advance, the captured railroads in its rear, quickly repaired, and easily defended, brought its base of operations practically up to its rear. It was, thus, relieved of this, formerly, the great difficulty of extended invasion.

The decisive circumstance which robbed the South of the defensive advantages of its wide territory was, the superiority of its enemies upon the water. The North retained the use of the whole national navy. While the South was chiefly a planting community, the North was manufacturing and maritime. Hence the multiplication of ships and sailors, which continued and increased her naval superiority, was easy and rapid for her. This cause also enabled her, by her blockade, to exclude the Confederates from all foreign sources of supply. The navigable water was therefore, all, the territory of the North. The ocean and the gulf, which bounded two sides of the Con-

federate States, belonged to their invaders, furnishing them a cheap and swift way of approach, secure from assault. This fact rendered the whole sea and gulf shores bases of operations for Federal armies. It made all an exposed frontier, and brought the enemy upon it all, as though he had embraced these two sides, as he did the other two, with conterminous territories of his own. The reader may represent to himself the significance of this fact, by imagining the inland kingdom of Bavaria assailed at once on four sides, by Austria, Switzerland, and the German States, all united under a single will. The professional soldier will comprehend the disastrous position of the invaded country, when he considers that the invader thus had two pairs of bases of operations, at right angles to each other; whence it resulted that from whatever interior base a Confederate army might set out to defend its frontier, its line of operations must needs be exposed, parallel to one of these Federal bases, and liable to be struck at right angles, by a force advancing from it.

But, worse than this, the Confederate territories were penetrated, in nearly every part, by navigable rivers, opening either into the sea, which was the territory of the North, or into the Northern frontier. On the east, the Potomac, the Rappahannock, the York, the James, the Roanoke, the Neuse, the Cape Fear, the Savannah, and on the south, the St. John's, the Alabama, the Brazos, stretched their navigable waters far into the interior; while the Mississippi, which is itself an inland sea, floating the greatest war-ships, passed out of the United States below Cairo, through the midst of the Confederacy, to the Gulf, which, again, belonged to its enemies. The Tennessee and the Cumberland, with their mouths opening upon the Northern frontier, in winter navigable for war-ships, as well as transports, curved inwards, near the heart of the Eastern quarter. The Arkansas and Red rivers opened the States west of the Mississippi. The difficulties of invasion were also unexpectedly removed, for the North, by the new decision given to the question, whether shore-batteries could command a channel against ships of war. Military authorities had usually answered this question in the affirmative. The answer was now reversed in favor



of the North. When ships were only of wood, and propelled only by winds, a motive power gentle, (except when it assumes the unmanageable violence of the tempest,) variable, and uncertain, artillerists might well boast that shore-batteries would usually destroy the ships opposed to them. But when the ship has within itself an unfailing motive power, as steady as the breeze and as swift as the tempest, and when it is coated with an iron plating, which, if not absolutely impervious to cannon-shots, at least delays for a long time the ruin of the framework, all is changed; it may expect to brave the bullets of shore-batteries with impunity, and to pass them without the trouble of silencing them. Thus, the forts designed to protect New Orleans, Memphis, and Vicksburg, were, in each case, passed by the Federal steamers without being reduced; and that which they were designed to defend was seized in spite of them; so that their retention became useless or impracticable.

Now the naval supremacy of the North having been asserted upon all these streams, it was the least part of the evil, that all their fertile valleys were exposed to ravage, and the wealthy cities on their banks, to capture. Each of the rivers became a new and secure base of operations for invading armies. Difficulties of distance were almost annihilated. No interior base from which Confederate armies could operate toward their own frontiers, to extrude the invader, remained secure from attack from one or another of these rivers. Hence it was, that defensive victories were usually fruitless of permanent results.

The justice of this view is sustained by the fact that *all the rivers were opened to the ingress of Northern armies and fleets* (save a small portion of the Mississippi between Vicksburg and Port Hudson) without much difficulty, and before the real 'tug of war' began. By May, 1862, they were all occupied; and the illusory advantages of territory and distance for the invaded, were all lost. The extent of the Confederate territory no longer interposed any difficulty to the invaders, except the demand for a plenty of money and mechanics.

The *third* subject of comparison s, obviously, the size of the armaments which the rivals were able to put into the field. To appreciate the amazing disproportion, the reader must ponder

a few figures. According to the report of the Adjutant General of the United States, two million five hundred and thirty thousand (2,530,000) soldiers were employed by land, during the course of the war. The whole population of the North subject to military duty, but not in service, had also been enrolled, and the number was found to be two million seven hundred and eighty-four thousand (2,784,000.) These facts reveal the curious result, (of which use will be made hereafter,) that, had no foreigners been employed in their armies, the North would have had, on land, nearly half (2,530,000 against 2,784,000) of their whole male population of military age, actually under arms. But the actual strength of their armies, at the close of the war, is very accurately fixed by the returns of volunteers mustered out of service. These were one million thirty-four thousand (1,034,000.) So that, adding the regular army, we find that they employed, at one time, one million seventy-two thousand five hundred (1,072,500) combatants, on land, 'to crush the rebellion.' Thus, something more than one doughty warrior to every four white Confederate souls, (including all the soldiers, old men, sick, women, children, babies, and cowards,) and at least one fighting man to every two Confederate souls adhering in any sense to that government during the whole of the last year of the war, were required to conquer their resistance! This vast host was served by one horse or mule for every two men in the field; and it destroyed draught animals at the average rate of five hundred (500) per day. It was ministered to by one thousand and eighty (1,080) sea and river transports, at a daily cost of one hundred and twenty thousand dollars (\$120,000) for their navigation alone. It was furnished during the war with nearly eight thousand (8,000) cannons, and nearly twelve millions (12,000,000) of small arms; while the masses of cartridges, shot, shell, and gunpowder were fabulous.

To the efforts of this Xerxean host must be added those of the navy of the United States. This arm employed, in the course of the war, one hundred and twenty-six thousand five hundred and fifty-three (126,553) sailors and marines; besides the countless mechanics and servants about the naval arsenals and *dépôts*. The Report of the Secretary, under date of Decem-



ber 5th, 1864, gives the following 'General exhibit of the navy, including vessels under construction,' to wit :

| No.   |  | Guns. | Tons.   |
|-------|--|-------|---------|
| 113   | Screw steamers especially constructed for naval purposes                 | 1,426 | 169,231 |
| 52    | Paddle-wheel " " " " "   | 524   | 51,878  |
| 71    | Iron-clad vessels.....   | 275   | 80,596  |
| 149   | Screw steamers, purchased, captured, &c., fitted for naval purposes..... | 614   | 60,380  |
| 174   | Paddle-wheel " " " " "   | 921   | 78,762  |
| 112   | Sailing vessels of all classes.....                                      | 850   | 69,549  |
| <hr/> |  |       |         |
| 671   | Total.....   | 4,610 | 510,396 |
| 588   | Total navy, December, 1863 .....   | 4,443 | 467,967 |
| <hr/> |  |       |         |
| 83    | Actual increase for the year.....  | 167   | 42,429  |

Now against these, place the following numbers of the Confederate armies. The aggregate of all the levies made during the whole war, was about equal to the available force present for duty at one time with their enemies; that is to say, about six hundred and sixty thousand (660,000;) or one-fourth the whole number enlisted by the North during the war. If we estimated the Confederate force effective for duty at any one time by this *ratio*, we should give them less than one hundred and twenty-five thousand (125,000) soldiers in actual service, the day their armies were strongest. When we remember that many of their levies were from districts soon occupied permanently by their enemies, to which therefore no provost-marshal could ever go to reclaim absentees, we might reasonably conclude that the number of Confederates actually in the field at any one time bore a still smaller ratio to the total of levies. But the superiority of the Confederate administration, with the higher patriotism of the people, wonderfully counterpoised this disadvantage, and enabled the government to present, in May, 1864, about two hundred and sixty-four thousand (264,000) combatants to Mr. Lincoln's nine hundred and seventy thousand (970,000,) the number he had under arms at that time. But it was impossible for the Confederacy to mobilize, for campaigning, as large a *ratio* as their enemy did. They had the same length of frontier to guard; they were therefore compelled to reserve for garrisons and posts a far

larger part relatively to their whole force. Hence, while Gen. Grant, as commander-in-chief, was able to put in the field, for aggressive purposes, six hundred and twenty thousand (620,000) men in May, 1864, Mr. Davis opposed him with about one hundred and twenty-five thousand (125,000) in the several active armies.

The disproportion of forces, and the relative character of the rival armies, may also be illustrated by the numbers actually arrayed against each other in several battles. At the critical turn of the first battle of Manassas, the official reports of Generals McDowell and Beauregard show that the decisive grapple for the key of the battle-field was made by six thousand five hundred (6,500) Confederates against twenty thousand (20,000) United States troops, including several regiments of regulars. The Confederates won it. At Sharpsburg, thirty-three thousand (33,000) Confederates repulsed ninety thousand (90,000) Federalists. At Chancellorsville, thirty-five thousand (35,000) Confederates beat Gen. Hooker, with the 'finest army upon the planet.' In the Wilderness, Gen. Lee met Gen. Grant's one hundred and forty-two thousand (142,000) with fifty thousand (50,000,) and without any accessions to this number, continued to breast the Federal army increased (save as the Confederate shot had thinned it) by sixty thousand (60,000) more. In the battle of Winchester, in the autumn of 1864, Sheridan only won a dearly bought victory from Gen. Early, by hurling fifty thousand (50,000) upon his twelve thousand (12,000.) In the closing struggle, Gen. Lee's thirty-three thousand (33,000) were not dislodged from Petersburg and Richmond until their assailants were again increased to one hundred and eighty thousand (180,000.) And finally, the remnant of Lee's heroic army did not surrender to this enormous host until it was reduced to less than eight thousand (8,000) muskets! The aggregate of men paroled at Appomattox was made up of some twenty or more thousand (20,000) stragglers, and men on detached service, who came in, to avail themselves of the supposed pacification, after the termination of military operations.

To this disparity of forces upon land, and overwhelming superiority upon the water, must be added the advantages



derived by the North from their blockade. This crippled the Confederacy, both in its military and in its financial efforts. The true basis for credit, upon which alone the 'sinews of war' could have been borrowed in Europe, (where alone they existed for the new government,) was in the Southern cotton and tobacco. Mr. Davis's administration should have had not only the large and precious crop of 1860, but an equal crop in 1861, and successive ones in 1862 and 1863, only diminished in bulk, but enhanced in price, upon which to found, at once, a system of foreign loans, and an all-persuading motive for foreign recognition. Only in 1864, did the stress of domestic wants become so urgent as to arrest all other tillage, for the production of provisions. Now the blockade never wholly arrested shipments of cotton; but it gradually became stringent enough to impose upon them a tax in the form of losses by capture, or of bribes to Federal officials, sufficient to disappoint effectually these great purposes. The financial right arm of the Confederacy was tied up. Again, the blockade imposed such difficulties upon importations that, although they continued almost to the last, they were limited to a few of the more compact articles which nurtured the war; and these were supplied in the most scanty and inadequate degree. Thus, the weaker combatant was kept, in a measure, unarmed and unfed, during the unequal struggle.

*Fourthly.* To give a correct estimate of Northern prowess in this war, the truth must be told—which is not pleasant to the pride of the Confederates—that their armies, apart from their deficient numbers, were never formidable in their character. The Confederate glory was dependent more on the weakness of their assailants, than on the intrinsic vigor of their defence. This assertion, true though distasteful, will be substantiated by these two facts: first, that the people of the South were never roused to what professional soldiers call a popular resistance; and secondly, that the government never had a really organized and disciplined army. As to the first, their enemies did indeed wage their war in a ruthless way, which gave abundant motive and justification for popular warfare; that is, for turning every male of the invaded country

into a soldier without the formality of enlistment, and for teaching him to regard every invader as an outlaw, to be assailed by any means, and in every place. But the Southern people never availed themselves of that right. Amidst all the unutterable horrors of the raids, the burnings, the wanton and ruinous ravagings, the home people of the South maintained a singular neutrality, and submitted with an unaccountable quiescence, leaving all defence and vengeance, alike, to the organized soldiery. Federal officials came and went along vast lines of transportation; cavalymen who had given the country people every reason to regard and treat them as wolves, traversed the regions they had desolated; bummers rode away with their spoil, secure from ambuscade unless some moveable column of the regular Confederate armies, under some Morgan, Quantrel, or Mosby, happened to be near. The citizens—plundered, ravaged, murdered—rarely avenged themselves by becoming *guerillas*.

This singular quietude of a spirited people was to be accounted for by several causes. Perhaps the most operative of these was the quixotry of the government; which, in its eager desire for the reputation of a civilized and honorable belligerent, uniformly neglected and discouraged such citizens as proposed to resort to those rights of nature which the outrages of the invaders justified. The people, moreover, were strangers to war and bloodshed. Two generations of profound peace at home, had made ease pleasant, and personal vengeance abhorrent to their habits. Their character was quiet, law-abiding, kindly, in the highest degree. Their high civilization, and the standard of material comfort and safety to which they were accustomed, had disqualified them for seeking the rough and turbulent vengeance of the *guerilla*. And then, the men of hardihood and spirit had responded at first to the call of their country, and were in the regular armies. So it was, that the Northern invader was almost wholly free from that species of annoyance which, when combined with the resistance of organized armies, becomes so terrible—popular warfare.

Next, when we asserted that the armies of the Confederacy, inadequate in size as they were, never showed themselves truly



good armies in quality, we did not impugn the gallantry of the bulk of the men composing them. The *morale* of a people is a thing of comparative estimate. It may be very true (as this discussion will evince) that, compared with that of the North, the *morale* of the Confederacy was lofty and brilliant. But it must be confessed that, compared with the historic standard, the Confederate people and soldiery were not, as a whole, a heroic body. The war found them in a transition state. Very many, perhaps the most of the reputable men (with nearly all the women) still cherished the hardy virtues and ennobling spirit of Revolutionary grandsires. Yet the corrupting copartnership with the North had continued just a generation too long. The leaven of a sensualistic morality and civilization was at work all through the South; the contagion had already tainted multitudes. Hence, although in the moment of first enthusiasm the people seemed to rally almost as one man to the call of liberty raised by the undebauched spirits, yet when the stress of danger and toil came, many proved themselves craven. The Confederate armies certainly included a class of patriot soldiers the noblest which this age can produce, under any clime. This class was numerous; it embraced, perhaps at all stages of the war, a majority of the levies. But there was also a large element of baser metal; men who begrudged their sacrifices for liberty, and shirked danger. And as death thinned the ranks of the original armies, this worse material became relatively larger.

But the fact, that the Confederacy never had a really good army, can be explained abundantly, without depreciating the gallantry of the Confederate people. It never had the leisure, nor the skilled officers, to organize a thorough army. The population, though gallant, was ignorant of war, by reason of two generations of peace. The fewest men are born soldiers, like the Jacksons, the Ashbys, the Sterling Prices, the Forrests. For ordinary mortals, it is a hard and long lesson, to learn that untiring self-denial, that devotion to duty, that study of detail, that carefulness, that self-government, that talent of command, that intelligence in the arts of attack and defence, which must be added to personal courage, to make the good officer.

Nothing can teach that lesson to them, except long experience in actual service. Now the Confederacy was compelled to organize into armies a larger portion of its men than any modern nation has been able to keep in the field. It was obliged to employ thousands of officers, where it had only a few score—the graduates of West Point, and veterans of the little army of Mexico—competent. There was not in the country a tithe of the practical knowledge of military duties which was necessary to organize and instruct the armies raised. That so much was done, to approximate such bodies of unwarlike men towards the character of regular armies, shows an extraordinary gallantry and aptitude for war, in the Southern people. But the armies never had enough competent officers to make them, as wholes, well drilled or well organized forces. At the beginning of the campaigns of 1862, they had more nearly attained this character: thenceforward, while individuals acquired the experience and hardihood of veterans, the Regiments gradually lost their regularity of movements, and tactics were more and more at a discount. Southern officers and soldiers uniformly testified that the drill of the Northern Regiments (except when confused by attack) was better than their own. But the Northern army must have been but a sorry standard of comparison in this particular, since they had a part of the same difficulties to overcome in extemporizing their forces. The most experienced Southern officers confessed that it was the rarest spectacle to see their advancing Regiments preserve such an *alignment* in their onset as to deliver anything like a collective shock against the enemy. Usually, the onset was the rush of an impetuous mob, in which the quick men were one or two hundred yards in advance of the slow. It was the testimony of the soldiers, that the front line, if supported by a second line of battle in the rear, must always make its account, when fired into by the enemy, to receive also at least a partial fire from their own friends; because no Confederates were ever sufficiently under the control of their officers, to hear Northern bullets whistle, without returning them. In the best Confederate Regiments, during the excitement of battle, eager suggestions from privates were as loud, and as influential, as commands from their officers.



This lack of drill was the necessary result, not only of a deficiency of officers, but also of the cruelty of the emergency. Troops must needs be hurried to the front before their training was completed; often, before it was begun. Cavalry horses were taken from pasture or plough to-day, and employed in action to-morrow. Recruits were sent to the front the day they were enrolled, and were merged at once in active forces, whose exacting duties in the march, the picket, and the line of battle, left them not one moment for drill, during a whole half year. Troops ceased to go into winter quarters; for the campaigns extended through winter and summer alike. The very lack of instruction and drill necessitated a four-fold exposure of the efficient officers; so that the army was at length almost wholly deprived of its more capable and experienced leaders, by death or capture. And, to crown all, the government had laid a foundation for defective discipline, by making the officers elective. From all these causes it came to pass that the Confederate armies, while displaying great gallantry on the part of a majority of their men, had scarcely enough discipline and drill to entitle them to the name of regular armies. This deficiency was confessed by the highest possible authority, that of Gen. Lee himself. This consummate soldier, speaking of the advantage of perfect drill and unity of action, and declaring that he believed this advantage so great, as against either of the forces then engaged, as to be almost incapable of exaggeration, pointed to it as the natural remedy for his inferiority of numbers. But then, pausing, he added, with accents of significant sadness: 'But I cannot give this drill to my army, because the enemy has my officers in his prisons.'

The Federal authorities were exempt, in the task of forming their armies, from the most of these difficulties. They had, first, the whole standing army of the United States, as a nucleus and model for their military crystallization. They had the major part of the instructed officers. They were able to draw mercenary officers from all the armies of Europe. They, as the aggressors, could choose their own time for the initiative, and needed not to move their new armies until they thought them ready, while the defendants must, perforce, move to meet them,

prepared or unprepared. And especially, the invaders, having their own populous country and all the world to furnish numbers, were able to keep their new levies in the *dépôts*, until they were drilled. It was easy for them to have enough men at the front, and enough also in the camps of instruction.

The work which the North had to do, therefore, was only to beat forces of one-fourth their own number, or less; and these untrained to war. They should have found the Confederate armies almost as little formidable in their quality as in their size.

*Fifthly.* The credit of the North for this exploit must also be affected by this fact, that while they had at the outset twenty-two millions (22,000,000) against five millions (5,000,000,) and during the real crisis of the war, twenty-two millions (22,000,000) against three million eight hundred thousand (3,800,000,) they did not deem these odds sufficient, but eagerly sought the aid of the rest of the world. They believed themselves, if we may infer from their actions, unable to crush this feeble adversary, without drawing from the Southern slaves armies as large as all those of the Confederacy, and from Europe hundreds of thousands of her proletaries. The Federal Secretary of War tells us that he mustered out of service about one hundred and seventy thousand (170,000) negro combatants. These were recruited almost exclusively from the slaves of their enemies. When Gen. McClellan, during the Presidential canvass of 1864, ashamed of so savage and disgraceful a dependence, promised that he, if made President, would disband the negro troops, Lincoln himself ridiculed his promise; saying that this would deprive the Union cause of the aid of two hundred thousand (200,000) men, and would thus render its success hopeless. That is to say, the head of the Federal Union judged that its twenty-two millions (22,000,000,) backed by all the mercenaries of Europe, would be unable to conquer these three million eight hundred thousand (3,800,000) Confederates, without the aid of two hundred thousand (200,000) partially reclaimed, black savages!

It would, perhaps, be hard to find documentary *data*, from which to learn the exact number of foreign recruits in the



Northern armies. We can show that this element was very large. All well-informed persons know that every country of Western Europe was canvassed by 'emigration-agents,' who, under this thin disguise, were recruiting officers for the North; and that a large part of that human stream, which flows annually into the United States, was, during the war, directed into the Union armies. Not only were foreigners found in every regiment; whole brigades, as that of Meagher, and even divisions, as that of Blenker, were composed exclusively of Irishmen or of Germans. In the prison *dépôts* of the Confederates, half, at least, of the captives gave evidence of foreign birth. The Secretary of War at Washington gives us the nationalities of fifteen thousand seven hundred (15,700) men buried in the military *Golgotha* of that capital. Of these, he tells us, four thousand nine hundred (4,900) were native white soldiers, four thousand one hundred and eighty (4,180) were negroes, and six thousand six hundred (6,600) were foreign-born. Either the native-born must have been more chary of exposure to wounds and disease, than the foreign-born; or else, in the armies which sent their disabled men to Washington, there must have been more foreigners than native whites in the ratio of nearly seven to five. Once more. The Reports of the war and navy departments of the Washington Government show an aggregate of two million six hundred and fifty-six thousand (2,656,000) men, actually engaged, at different times, in the military and naval service of the war. But the whole number of men capable of military duty, in the 'loyal' States, who had not been drafted, was two million seven hundred and eighty-four thousand (2,784,000.) Whence, if those States had done their own fighting, it would follow that nearly half their men must have been for a time in service. But the uniform testimony of travellers and citizens was, that the walks of civil life in the North exhibited a very slight depletion of their customary throngs. While, in the South, every assemblage, at church, at the seats of justice, in the streets of towns which were not military posts, gave striking evidence of the absence of nearly all the arms-bearing men, at the North, a very small part of the home population was absent in the camps. Now, the only

solution of this riddle is, that their levies were filled chiefly with foreigners. Putting these data together, it seems very plain that less than half in the Northern armies were native citizens. In other words, these twenty-two million (22,000,000,) after recruiting their armies with two hundred thousand (200,000) negroes, were not able to conquer the three million eight hundred thousand (3,800,000,) until they had associated with them half a million of foreigners. The North found it necessary to call all the world to its help, in order to overpower its feeble adversary!

But, *sixthly*, the whole story is not yet told. Even this whole people, with the negroes and all the world to back them, acknowledged themselves unable to subdue the resistance of their little foe, by any ordinary methods of warfare recognized among civilized nations. They were compelled to add to these the most ingenious combination of savage and illegitimate expedients, to undermine the adversary whom they could not meet in fair and equal battle. One of these was the incarceration of unarmed citizens, captured in the pursuits of civil life, who might perchance either become Confederate soldiers afterwards, or might aid some soldier or soldier's family with their industry. Another was the exclusion by blockade of medicines for the sick; a barbarity unheard of before among polite nations. The calculation was, that the stroke of cold steel or disease, in the body of the gallant adversary, might be aggravated unto death in the more instances; and that the pestilence might ravage the home population, unchecked by the skill of the physician.—Another was the destruction of food and the implements of industry, among the peaceful citizens of the South. It was cunningly calculated, that by these means, some brave enemies at the front might be recalled home by the harrowing news of famine at their beloved hearthstones; or that, at least, their arms might be paralyzed by the anguish; and that some others might be starved out by lack of rations. What did it matter that helpless women, little children, old men who had shed their blood for the flag of the United States, the poor negroes, innocent in every sense, of the war, might perish of the dire but undeserved doom of



famine? No matter, if there was a chance thereby of weakening some of those few brave arms, which they so much dreaded in battle. History will never disclose the ruthless and universal diligence of the North in this work of destruction. It was for this it needed its million (1,000,000) of destroyers. Its only hope was to make the dearth as wide as the hostile country. Its politicians boasted with an amiable wit, that if the prowess of neither Gen. McClellan, nor Burnside, nor Hooker, nor Grant, could prevail to 'crush the rebellion,' they had enlisted one, more all-conquering than the whole of them, *general* starvation. Scarcely a county in the interior of the largest Southern State escaped this systematic ravage. Wherever the Northern troops went, work-animals were stolen or slaughtered, with all other live stock; all ploughs and other implements of husbandry broken; mills and factories burned; tanneries destroyed, with their hides; and the blessed bread, sacred gift of divine Providence to man, either burned or trampled under the horses' feet. The sweeping ravages of Sheridan, in Virginia, under the express orders of the commander-in-chief, and of Sherman in South Carolina and Georgia, will never be forgotten while history has a verdict to utter. The flatterers of these men boasted that the desolation was to be so utter that the crow flying across the wastes would be compelled to carry his own rations! And if it was not so complete, the only reason was, that the industry of even Northern malice wearied of the work of destruction.

These methods, and not the Federal arms, were, in truth, the weapons which wrought the ruin of the Confederacy. Its little armies never were beaten; they were, in fact, dispersed by the difficulties of subsistence. They did not yield to the force of arms, but to the efficacy of these savage and cowardly means.

One more artifice of barbarism remained, by which the gigantic enemy could supplement his lack of prowess; the violation of the *cartel* for the exchange of prisoners. As soon as the Washington Government came to understand the task it had undertaken, and to perceive its advantage in wearing out the adversary which it could not meet in a fair field, it began to seek pretexts for evading its own engagements for this ex-

change. Ultimately, it came to act upon the policy of holding every dreaded Confederate, whom it captured. It mattered not to it, that a larger number of its own men were left to pine or die in captivity. At last, when, early in 1865, the arguments or the frank concessions of the Confederate Government had removed the last pretext for delaying the general exchange, 'Butler the Beast' was selected by the Federal Generalissimo, as a fitting tool, to write a letter so insolent, and so unworthy of a soldier, that it was calculated all intercourse must, perforce, be interrupted, and thus, the doors of the prisons be finally closed upon the captured Confederates, until their aid would be too late for their cause. 'The Beast,' disgraced a little after by his master, expressly disclosed this design! And the commander-in-chief, with equal candor, declared, that if the fifty thousand (50,000) Confederate soldiers, whom he held, were released, and added to the armies of their country, its conquest would be impossible. He manifestly counted it for nothing, that this exchange would restore to his ranks fifty thousand (50,000) of his own braves! This, he felt, would be no equivalent; the conquest of that number of Confederates would require an addition of three hundred thousand (300,000) negroes, or mercenaries, or native Northerners.

Here, then, is the exploit of the Northern people; that twenty-two million, (22,000,000,) possessed of every material advantage, aided by two hundred thousand (200,000) negroes filched from the South, and by all the mercenary adventurers of the world besides, were able to overpower three million eight hundred thousand, (3,800,000,) after three years, and after they had added to all the legitimate appliances of civilized war, all the savage expedients of bad faith, ravage, sack, and disease. In the sober light of these facts and figures, the claim of *prowess* for the North, in this war, is infinitely preposterous. That it did not crush its puny antagonist within the first six months, is subject of burning reproach. That it admitted itself unable to crush him at all single-handed, and was compelled to invoke the aid of all Europe, of the poor negro, of savage artifice, and barbarities long discarded by civilized man; this should make it silent forever, as to the glories of this war. It is, for it, the



most mortifying exhibition of national impotency, which modern history discloses, anywhere this side of China.

But still it is pleaded, that if the North failed to display signal prowess in the field, it did nevertheless carry through this great war with spirit and determination; and did actually overcome, somehow, a great resistance. Even European observers, ignorant of facts, seem to admit that, if for nothing else, the North is to be dreaded for its perseverance, its mechanical industry, and its financial resources. The plain statement of a few truths will also remove this conclusion. It will be seen, that the cost at which the victory over the Confederates was won is a financial burden, which effectually incapacitates the United States from again fighting with money; that the Northern people, in a moment of reckless phrensy, purchased their revenge by crippling themselves; and that the ruinous price paid for their triumph leaves their financial credit in as ugly a condition as their military. They, more than any other people, account money to be 'the sinews of war.' On that calculation, the ability of the people for future wars is to be measured by its ability to pay additional taxes, and to contract further loans in the money-markets of the world, for military enterprises. If the United States can get as much more money, (and can find among Southern negroes and foreign emigrants another seven hundred thousand (700,000) of 'gudgeons,' to be befooled,) then, perhaps, they are competent to the conquest of another spirited little nation of four or five million souls. Such seems to be the measure of their promise for military exploits in the future. There is something impressive to the bystander, in the exhibition of tremendous effort. If it be granted that the *athlete* can do again and again what we have just seen him do, he is invested in our eyes with a very portentous aspect: we feel that he would be a terrible fellow to have upon our hands. But when we discover that the present efforts (than which none less would have saved him from being beaten by his little adversary) are so far beyond nature, that they have ruptured a blood-vessel or an intestine, and crippled him for life, we degrade him from a formidable antagonist to a broken down champion. Our panic is effectually cured.

To appreciate, then, the financial resources of the United States for further military enterprises, the experienced public man will examine the following points: the existing burdens of debt, which must still be provided for, whatever new ones may be incurred; the cost of the existing administration, to the people; the ability and disposition of the people for tax-paying; the economy and efficiency of the present administration; the present state of the national credit, with the probable influence upon it of a great increase in the national indebtedness; the unity and patriotism of the popular feeling; and all these, compared with similar elements of strength in the nations which are to be the probable antagonists.

What then are the existing burdens of debt, which the United States must carry through any future wars? At the end of 1868, the recognized debt of the Federal Government was three thousand and eighty-six and a half millions of dollars (\$3,086,438,635.) Nearly the whole of this accrued in the four years of the Confederate war. This total includes the current treasury notes, called greenbacks, (which are the Government's promises to pay,) and the certificated debt not yet bonded. The annual interest upon this debt, which must be raised by taxation, is one hundred and forty and a half millions (\$140,424,000;) of which the larger part is paid in coin, although the loans were received by the Government in depreciated paper. To pay this debt, the United States have thirty-four and a third millions of souls (in 1866, 34,288,870.) Let this debt be compared with that of the leading Powers of Christendom, especially those of Western Europe. England owes a national debt of three thousand six hundred and forty-two millions of dollars (\$3,642,000,000,) and pays upon it an annual interest of one hundred and twenty-six millions of dollars (\$126,000,000.) To bear these burdens, there are in the British Isles about twenty-nine millions (29,000,000) of souls; but they have, in the remainder of the British Empire, one hundred and fifty-four millions (154,000,000,) who are commercially tributary to them, and thus supply the ability to pay taxes sixfold above their numbers. It must be remembered, also, that while the British debt is the gradual result of a



number of great wars and glorious enterprises, continued for generations, which have added vast territories and untold wealth to the Empire, the debt of the United States was nearly all incurred in four years, as the price of the desolation of the fairer half of their home domain.

The Empire of Austria has thirty-five and a half millions (35,500,000) of souls. Its national debt is about one thousand four hundred and nineteen millions of dollars (\$1,419,000,000.) Austria is usually regarded as the most burdened and paralyzed of the great Powers of Europe. France, with its dependencies, has a population of forty-four and a half millions (44,500,000.) Its national debt is two thousand two hundred and forty-seven millions of dollars (\$2,247,000,000.) All these great Powers feel that, in the burdens of their debts for former wars, they have given caution to mankind for a pacific behavior in the future.

But the real burdens of the people of the United States have not yet been disclosed. The Governments of the several States acknowledge an aggregate of debt, amounting to about three hundred and fifty-seven millions (\$357,000,000.) This should be added, because it is a part of the load the people have to carry; the payment of interest and principal must be provided from the taxes of the same tax-payers who pay the Federal debt. So, in comparing the burdens of the United States with those of its neighbors, fairness requires the same addition to be made; because here, this Federal, and these State Governments only perform, together, the same functions which in Europe are rendered to the people by the central governments. The State debts, then, must be added.

But this is not all. It is very well known that the Northern people were so averse to military service, that enlistments were, in most cases, procured only by high bounties. When the Central Government began to draw imperative requisitions for men on the States, the local authorities, instead of simply drafting the required numbers from among their own militia, almost universally made arrangements for purchasing mercenaries to supply their *quotas*; thus relieving their own citizens from the dreaded service. The price usually paid, towards the

end, for the human cattle for Confederate shambles, was not less than fifteen hundred dollars each. A sorry commentary, by the way, upon the courage and patriotism of that people, that so large a bribe was needed to persuade them to 'save the life of the nation.' But thus it came to pass, that not only the States, but cities, counties, country towns, and even the rural subdivisions called, among that people, townships, raised loans, and purchased substitutes. Laws were passed to authorize them to make such loans, and to levy the taxes necessary to provide for their interest. Money had indeed been raised, in many cases, for internal improvements, in the same mode; and similar loans for canals and railroads remain as a part of the popular burdens. The aggregate of these bounty-debts cannot be estimated by us, from any evidences in our reach; but some *data* will be given to enable the reader to approximate it. The city of Philadelphia alone, it is believed, owes a debt of forty-four millions (\$44,000,000,) chiefly for bounties. It was a very 'loyal' city. It claims about six hundred thousand (600,000) souls. The State of New York admits a bounty-debt of its own of twenty-six millions (\$26,000,000.) But cities, counties, and townships, within the State, have also their own little debts for this and similar objects, in addition. The Comptroller of the State Treasury received incomplete returns of these local debts, from which he made an aggregate, at the end of last year, of eighty-three and a half millions (\$83,500,000.) The State of New York claims a population of three million eight hundred thousand (3,800,000.) The two instances of this city and this State, may indicate how the local burdens have accrued.

A few other items may aid in our approximation. The Federal Secretary of War informs us that, in the latter part of the war, there were one hundred and thirty-six thousand (136,000) re-enlistments of the veterans honorably discharged. It is well known, that these usually received the highest bounties. If we place them at fifteen hundred dollars each, these cost the Northern people two hundred and four millions (\$204,000,000.) The system of bounties was general from May, 1863, until the end of the war. The Government itself fixed the *minimum* price of a man at three hundred dollars,



by appointing that sum as the cost of an exemption from the draft. But it is well known that few substitutes were purchased at so cheap a rate. The Secretary of War informs us that after May 1, 1863, there were one million six hundred and thirty-four thousand (1,634,000) enlistments. Placing the cost of each of these enlistments at three hundred dollars, which is far below the average bounty, somebody had to pay for them four hundred and ninety millions (\$490,000,000.) The 'bounty-jumpers,' as is well known, perpetrated immense frauds; and the number of bounties paid them was far larger than that of the enlistments.

We are thus convinced that this huge 'unknown quantity' in the problem, the local and State bounty-debt, cannot be less than many hundreds of millions of dollars. But in estimating the actual financial burden which the people of the United States must carry, through any future war, all this must be added. It was a part of the cost of the Confederate war. The interest and principal of it must be paid by the same people who have the Federal debt to pay. If the policy, pursued by the Government as to the local obligations incurred in the war of the Revolution, is again to prevail, all these bounty-debts should be assumed and funded by the United States. Already this claim is heard in many quarters. The recognized State and Federal debts, as we have seen, amount to three billion four hundred and forty-three million dollars (\$3,443,195,000.) It is most manifest, that the total mass of public debt now resting on the American people, (nearly the whole incurred in the late war,) for the payment of which provision must be made by taxation, must be at least four billions of dollars (\$4,000,000,000.) Mr. Andrew Johnson, late President of the United States, and an ardent advocate of the war, always affirmed constantly, that the total cost of the war, to the taxpayers, would prove to be five billions (\$5,000,000,000.) He, of course, is good authority. And the interest on this debt is from *five to seven and one-fifth per centum*!

Some may be so thoughtless as to suppose that *repudiation* would lift this vast *incubus* off the shoulders of the nation. The fatal objections to reaching that deliverance by that mode,

are, first, that nobody would lend his money for the second war to a debtor who so treacherously rid himself of his obligations for the first; whence the national credit would at once succumb; and, secondly, that the annihilation of so many securities of public debt would immediately produce a financial convulsion, at which the private wealth of immense numbers at the North, already to a very large extent speculative and factitious, would collapse, like a soap bubble pierced with a straw. The overburdened credit of the government cannot be lifted up by repudiation.

Another burden which the people of the United States must carry, through any future war, along with the interest of its existing debt, is the cost of its present administration upon the peace establishment. In the year 1868, the Federal income was about three hundred and seventy-six and a half millions (376,500,000,) and the expenditures were about one million (1,000,000) more. We have seen that one item of this expenditure was the annual interest upon the debt, one hundred and forty millions and a half (140,500,000.) This left something more than two hundred and thirty-six millions (236,000,000) as the cost of the military, naval, and civil service. But the governments of the States, which are an unavoidable part of the public burdens, cost last year nearly seventy-six and a half millions (76,500,000.) Adding this sum, we find that the American people actually paid to their governments, the last year, four hundred and fifty-three millions of dollars (\$453,000,000.) And this was exclusive of the support of religion, (with which the governments, State and Federal, profess to have nothing to do,) and exclusive also of the costs of municipal administration, and of the larger part of the cost of the national education, which are paid for by the people separately. Nor is the interest on the vast bounty debts included.

Let this burden be compared with those borne by the leading nations of Europe, which are usually believed to tax the strength of their subjects as severely as nature can well endure. Austria, with a million (1,000,000) more of people than the United States, pays her government annually two hundred and thirty-eight and a half millions of dollars (\$238,500,000.) The



forty-four millions (44,000,000) of Frenchmen are taxed, in all, three hundred and eighty-five millions (385,000,000.) The British Empire collects a national revenue of three hundred and thirty-seven millions (337,000,000.) It appears, therefore, that the people of the United States now have the most costly and onerous system of government to sustain, and the heaviest taxation, in a season of profound peace, of any people in Christendom. But the most startling fact is, that their money goes so very short a way towards defending the country. While Austria, out of the revenues above mentioned, pays the interest on her debt, and the whole cost of government, she sustains also two hundred and forty-four thousand (244,000) armed men, as her peace establishment; France, four hundred and fifty-eight thousand (458,000,) and England, two hundred and six thousand (206,000.) But the United States, with an income larger by one-fourth than the largest of them, and a home population whose government should cost little, seeing the people in theory govern themselves, sustains only fifty-six thousand eight hundred and eighty-one (56,881) soldiers, sailors, and marines, to defend the country! The comparison of this military establishment with that of Great Britain, is especially damaging, because that empire, like the United States, has no conscription, and raises its armies by enlistment and pay. How frightful must be that incompetency, disorder, and peculation, which, out of revenues so immense, effects so little for national defence!

In the United States a smaller population actually pays a larger sum than in any of the old despotisms of Europe. It is thus demonstrated that the taxation must be more onerous here than in any of them. Let this be illustrated in a few particulars. The municipal government of the city of New York, with about nine hundred thousand (900,000) people, costs twenty-two millions of dollars (\$22,000,000) annually, in addition to the State and Federal imposts. The taxes of the citizens of the State of New York exacted by State laws, amount to twelve dollars (\$12) annually for every soul. There are townships in that State where the Federal, State, and local taxes make six *per centum* upon the total values of all the

property of every species, rated at a full valuation. The income tax of Great Britain is now (if we mistake not) two and a half pence on the pound sterling of clear income, which is but little over one *per centum*. The income tax of the United States is five *per centum*. This tax in Great Britain yielded, last year, not quite thirty millions of dollars (\$30,000,000;) in the United States, thirty-three millions (33,000,000.) But the former country, with its hundred and fifty-four millions (154,000,000) of commercial tributaries, is five times as able to pay an income tax as the United States.

It may be objected to this surprising picture, that it cannot be consistent with the elastic prosperity of this teeming, new country. The reply is, that the country is not now either elastic or prosperous. The burden of taxation is actually crushing it into a collapse. All industrious classes, who do not make their gains at the expense of others, are sensibly overburdened. The traffic of the country is unhealthy, and the circulation of commodities is extravagantly costly. Notwithstanding nominal high wages, the laborer is more and more depressed; and in our great metropolis every tenth human being is a pauper in midsummer!

Now if the people of the United States, with inferior numbers and ability for enduring taxation, are, in this time of peace, burdened with a larger debt, heavier taxes, and a more costly, prodigal, and inefficient government, than any of their great neighbors, it is plain they are financially helpless for great military enterprises against those neighbors.

But let this argument be enhanced by a view of the present state of the national credit. The only currency of the people is a depreciated paper, based, not on a capital stock of specie, but on the promises to pay of this overburdened debtor, the Government. And meantime the bonds of the United States, bearing six *per cent.* interest in specie, fluctuate in London from seventy-two to eighty-three in the hundred; while the scrip of the British National debt, paying an interest of only three and a half *per cent.*, sells almost at *par*! The present burdens of the people so obviously tax their utmost strength, that the credit of the Government staggers under those burdens



in the hour of peace, and in the glow of recent victory. Let a grave danger arise, bringing the certainty of another great addition to this monstrous load, and the whole fabric of public credit would dissolve at once into ruin.

The Washington Government, if it is wise, will therefore cultivate a very pacific demeanor towards all its powerful neighbors. And it will be further inclined to this prudent policy, if it considers the tendency of its methods for conquering the South, and for treating it when conquered, to make the ex-Confederates trustworthy and staunch supporters of its flag under the burdens and trials of another war. The lesson to be drawn from this review of the 'situation' is, therefore, obviously one of peace.

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ART. VII.—1. *Physical Survey of Virginia: Her Geographical Position; its Commercial Advantages and National Importance.* Preliminary Report by M. F. Maury, LL. D., etc., etc. Second Edition. New York: D. Van Nostrand. 1869.

2. *The Central Water-Line from the Ohio River to the Virginia Capes.* Compiled and Published by Order of the President and Directors of the James River and Kanawha Company. Second Edition. Richmond: Gay, Clemmitt & Jones. 1869.

The transportation of agricultural produce from the Mississippi Valley to the Atlantic Coast, is becoming the greatest material problem of this age. All the other great Valleys of the world, those of the Nile, Ganges, Yangtze, and Amazon, find a natural outlet for their commerce where their great central rivers disembogue into the sea. Trade follows the course of their waters. Such, however, is not the case with the Mississippi Valley. The current of its rivers runs away from its

market, and enters the sea at a place unfavorable to intercontinental trade, and in a latitude whose heat and dampness are injurious to the products of a more northerly climate. Commerce through this outlet must ever have been confined to commodities which could bear the expense and delay of so circuitous a transportation, and the heat of a tropical sun.

The settlement of this valley has also been anomalous, and this, more than anything else, has determined the road taken by its exportations. Although a comparatively small colony established itself near the mouth of the Mississippi at an early period, the real settlement of the valley took place from the north southward, and its population poured in, like its waters, from the tributary valleys. Each pioneer band, as it pushed farther into the forest, maintained connections by land or water with an easterly neighbor, and settlements were almost restricted to localities, which were sufficiently accessible to eastern markets to make the cultivation of the soil profitable. From this circumstance, as long as trade can find sufficient roads and canals, it has sought to return in the path of immigration, and thus by the directest route to supply the more crowded populations from which the West has been peopled. Across that direct route the Appalachian Mountains throw a formidable barrier. Shall this obstacle be pierced, or must commerce succumb to it? Must the lighter products only be sent directly across the country, while the more bulky take the circuitous routes by the Lakes, the St. Lawrence, and the Gulf of Mexico? Such is the question now propounded to the enterprise of the country. The pressure of an exuberant productiveness in the West, the improvements of steam navigation, the enlargement of canals, the competitions and consolidations of railroad lines, the jealousies of rival cities and rival States, all contribute to concentrate attention on this, the pre-eminent question in the material development of America.

The history and character of modern roads and canals, furnish every indication that, should the exports of the Mississippi Valley become a hundred-fold greater than they now are, so long as there is demand for increased transportation, it can and will be furnished directly across the Alleghanies. Indeed, the



means have heretofore been well nigh sufficient, as is evidenced by the uniformly prosperous condition of agricultural interests in the North-Western States. Those who apprehend a check in Western progress from a glut of unsaleable products, forget that we have just reached the era of ship canals and consolidated railroad lines. Many persons now living will doubtless see a series of mammoth railroads stretching from the Atlantic to the Mississippi. These lines will have broader tracks, furnished with larger locomotives and cars, which, moving with less speed, will be devoted exclusively to heavier goods. Why such roads have not been already built, is not far to seek. The surplus of produce has not thus far been sufficient to compel their construction; nor have there been, until recently, corporations with sufficient capital to stretch their arms beyond a comparatively limited field. There are now, however, four companies in the United States with abundant wealth to control consolidated lines to the Mississippi; the New York Central, the Erie, the Pennsylvania Central, and the Baltimore and Ohio. Should General Mahone succeed in perfecting a consolidation from Norfolk to Memphis, already so auspiciously begun, still another would be added. Some of these companies will soon commence laying tracks for *freight* railways. The Erie road has now a broad-gauge track. Had not the interests of the stockholders and public been sacrificed to the reckless stock gambling of their presidents and directors, both the New York Central and the Erie might already have completed such road-ways as would enable them to diminish their tolls on traffic.

New canals will also be dug, and those already in existence will be widened and deepened. The machinery for transferring freight will be improved, while the transshipments will be reduced to the least possible number. Improved grain elevators have done much, and will do more, to prevent canals getting 'behind the age;' and when the same company which owns the canal packets, shall also own lines of shipping, we may expect such adaptation in their structure as will greatly facilitate transshipment.

These conjectured improvements, and the probability of

others more unexpected and radical, give assurance that the great carrying trade over the Alleghanies will continue to grow with the growth of the West, and to maintain its ascendancy over the less direct, competing routes.

A great increase in the demands of Western trade, and a prospective increase in the facilities of communication being conceded, every possible channel of intercourse between this vast fertile region and its market, becomes a matter of interest. Every gap or sloping ascent of the mountains, every approximation of the waters of the Atlantic slope and Mississippi basin, will excite the attention of commercial enterprise.

The most casual inspection of a map of the United States must satisfy any one that Virginia occupies an important position, with reference to this trade. If her position alone be considered, it is found to be more advantageous both for internal and for coasting trade than that of any State on the Atlantic. The harbor, or rather system of harbors, at Hampton Roads, is the best in the United States. It offers to vessels security while in port, and safe ingress and egress. Just outside of the Virginia Capes flow the Gulf Stream and the reflux currents on either side of it. These can be made available for increased speed northward or southward.

Great as these advantages are, those for internal traffic are equally as great. The interlocking branches of the Potomac and Monongahela, and of the James and Kanawha rivers, offer what is now deemed the only practicable means for water communication from East to West, south of the New York canals. In Virginia and West Virginia the different ranges of the Appalachian system are cut perpendicularly by the rivers stretching from them in each direction. Where these rivers break through the mountains, gaps are formed, available for roads and canals. Although the mountains here reach greater elevations above the sea than farther north, their sides in places slope so gently to the top as to furnish an easy ascent for roads of moderate grades, without the windings which would be necessary to ascend steeper acclivities.

The second advantage for internal trade possessed by the great harbor of Virginia, is its situation at the outlet of the



largest, and, indeed, the only considerable river system, which drains the Atlantic slope. This system naturally embraces the Susquehanna, the Potomac, and the James, with their tributaries, together with the Chesapeake bay, its numerous inlets, estuaries, and smaller rivers. In addition to this, all the rivers which discharge into the Albemarle and Pamlico sounds, are connected with Hampton Roads by the Albemarle and Chesapeake Canal, which offers a secure exit to that trade, unwilling to brave the treacherous navigation along the coast of Carolina.

This great system of inland waters, with its possible connections and improvements, presents a prospect of future development and material growth, which it is difficult to exaggerate. Along the banks of its rivers and shores of its inlets is to be found every variety of soil, and a climate which, world around, is most auspicious for the comfortable life and highest physical development of the human species. Its soil is well adapted to every product, except sugar, known to the American farmer. Its climate is alike removed from the enervating heat of the tropics and the biting rigor of the North. As one floats down its rivers, from mountain, through rolling lands, to its eastern plain, his eye is greeted by almost every phase of landscape; and when he enters its giant sea-arms—with their coasts cut into pleasing irregularity, by the encroaching sea—scenes of placid beauty are presented unsurpassed on the American continent. When the fever-god has been driven out by the destruction of his fastnesses—the forest and the swamp—this section will become almost an earthly paradise.

But of all the advantages presented by Virginia, the one incomparably the greatest is her central position. This makes her more convenient to the coasting commerce of the United States, and to all the trade of the southern hemisphere, than more northerly States, while it offers rare facilities for internal traffic. If a line be drawn, all of whose points are equidistant from New York and Norfolk, it will pass near Dover, Delaware, just north of Sandusky and Toledo, Ohio, a little south of Milwaukee, Wisconsin, near St. Peters, Minnesota, and will strike the Pacific about the middle of the Oregon coast. The whole Mississippi Valley south of Minnesota, the whole Mis-

souri Valley south of Fort Pierre, in Wyoming Territory, and the Ohio Valley south of Pittsburg, will be seen to be more naturally tributary to Norfolk than to New York. The entire line of the Union Pacific Railroad, and the line of its directest eastward connections—almost all of Ohio, and all of Indiana, Illinois, Iowa, Nebraska, and the States south of them, are nearer, and many points north of the equidistant line indicated, on account of the direction of the flow of rivers, could be made more accessible, to the former than to the latter city.

Such is an enumeration of the advantages of the geographical position of Virginia. Why has she not availed herself of them to build up her cities and commerce? To Virginians at least, these are not new themes; and yet Norfolk has grown slowly, and the works under construction to connect it with the West, have crawled lazily up the mountains. Why is this so? Several things have combined to clog the wheels of material progress in Virginia. The existence of slavery, whatever may be said of the social system it engendered, and the moral and chivalric tone it cultivated, was in Virginia inimical to material development. It produced the *satisfied* state of society. Some one has said that to be civilized is to be never satisfied; and if material progress be accepted as the sole test of civilization, this is unquestionably true.

The necessities of the West, too, which it was thought would compel the construction of these works, have been over-estimated. Norfolk has not shown sufficient enterprise, and the country along these lines of improvement has not been thickly enough settled to build them without aid. If there is one thing which is deadening to the life and energy of a city, it is the reflection that its position is such that it *must* be a great city, and that somebody outside *must* build its railroads, in order to get to market cheaply. Such a city lives in the future, and its newspapers and pamphlets team with magnificent ideas of continents belted, and the wealth of States poured into its lap; but its kingdom will never come until some one bestirs himself. Commerce may build marts, but marts must also build commerce. Each must hold out the helping hand to the other. Had Norfolk, and the State at large, been thoroughly awake



to the crisis, which the invention of railroads produced in the world of business—had they, like Baltimore, stepped, if need were, to the verge of bankruptcy, and prostrated their trade for years by an enormous debt, in order to complete their connection with the West, Norfolk would have been by this time the commercial rival of Baltimore and New York.

We wish to say nothing in disparagement of Norfolk. Socially, it is one of the pleasantest cities on the American continent. A mischievous wag might suggest that this is partially due to a certain liberalization of sentiment growing out of the entertainment of such enlarged ideas, as fill the minds of its inhabitants on contemplating their future greatness, when New York and Philadelphia and Baltimore shall have become tributary and provincial. This same wag might go on to say, that Commodore Maury has done the people of Norfolk an injury, by his pamphlet, with its new stock of magnificent ideas; for the most 'great-thoughted' of that community could hardly have dreamt of water connections with the Pacific *via* Fort Benton, and with the Gulf of Mexico *via* the Coosa Canal. And had he dreamed this dream, he would hardly have consoled himself for making no attempt at the construction of these mastodontian works, because they were '*national necessities*.' The utmost flight of Norfolk's choicest visionary has never looked to any higher railway construction than the necessities *of the West*.

Several causes have operated to prevent the West from completing the works of internal improvement through Virginia. That section has been very prosperous with the means of transportation already at its command, and, consequently, has not felt that pressure of necessity, which would bestir it actively in the development of other means. The wants of the East have contributed as much as the superabundant production of the West, to build up lines of communication between the two, and those wants have chiefly determined the location and direction of roads. A desire to find profitable investment for Eastern capital has been the great source of our vast system of improvements, and to this appeals should be made, rather than to the supposed distress of the West. Another thing, has been

an ignorance of the peculiar advantages of the works proposed. New York city controls the best means for disseminating information on this subject, but it has not been interested in that dissemination. Long prior to the commencement of the James River and Kanawha Canal, in 1836, the benefits to accrue to the country from its construction were well known in Virginia; but the subject seems never to have attracted very general attention outside of that State. Recent movements, however, in some of the Western Legislatures, indicate that it is about to receive a consideration commensurate with its importance. Meanwhile, fuller knowledge of the country between the Virginia Capes and the Ohio River, and the change of labor consequent on emancipation, will attract such an emigration as will fill up the country between the Virginia Capes and the Ohio River. This, in the end, offers the surest guarantee for the completion of the lines of trade destined to traverse it.

Two systems of internal improvement, stretching westward through Virginia, are in process of construction. Each of these systems, according to Commodore Maury, should have a water line and a rail line. The water line from the South-west extends up the Alabama river, then up the Coosa, by canal from the Coosa to the Tennessee at Gunther's Landing, thence up the Tennessee and its tributaries to Saltville, in South-western Virginia. From this point to Lynchburg, a distance of 176 miles, there is a break in the water connection, to be filled in by a double track railway. This is a line indicated by Commodore Maury. He gives no reliable data by which to test the practicability of a canal from the Coosa to Gunther's Landing. It seems, at least, to be of little importance, as the break from Saltville to Lynchburg, with its transshipments, would prevent it from competing with continuous railway lines.

The South-western railway line is the present one from Norfolk to Chattanooga and Memphis. It is proposed to shorten this by the line already chartered from Norfolk to Bristol, and to supply it with an additional track. The North-western water line is the James River and Kanawha Canal, to be continued 289 miles from its present terminus at Buchanan (196



miles above Richmond) to the Ohio. Here it connects with the 16,500 miles of navigable waters in the Mississippi basin. The rail-line to the North-west is by the Chesapeake and Ohio, now completed to the White Sulphur Springs, some 225 miles from Richmond. A distance of some 200 miles is to be filled, to join this terminus with the North-western roads. These roads form a net-work of some 18,000 miles of completed track. By these works Norfolk becomes connected with an aggregate of some 36,000 miles of rail and river transportation.

A comparison of the James River and Kanawha Canal with the Lake and Gulf of Mexico routes, shows that in the country lying between St. Paul and New Orleans, and Mobile and the Rocky Mountains, an average of some fifteen or twenty cents per bushel will be saved in the transportation of wheat by the Virginia line. Commodore Maury and Major Carrington, President of the James River Canal, give, at length, the data on which this comparison is made. Other things favor the Virginia route. Trade by the Lakes and Erie Canal is blockaded by ice some five months in every year; and the storms prevailing at certain seasons on the Lakes make navigation dangerous, and increase the rates of insurance on shipping and freights. By the Gulf route, vessels have to contend with the tempests of the Florida Pass, and grain of every kind is liable to heat from the dampness of the climate. The Virginia Canal is closed by ice only some fifteen days each year, and is free from storms. Lying wholly in the territory of the United States, it runs no risk of being closed in time of war. The value of this line is still farther enhanced by the recent successful introduction of the barge system on the Mississippi and its branches. This obviates the necessity for breaking cargo in transshipments from rivers to canals, or from canals to rivers. The additional advantages of this route, too numerous to mention, can be found stated with great fulness and fairness in the Report of Major Carrington.

The chief difficulty this canal has now to contend with is, that it is unfinished. The way traffic of many works, when once commenced, is sufficient to complete them, or to offer the means of guaranteeing funds advanced for their completion.

But this line is projected for through-trade, and it was not contemplated that way-trade would contribute materially to its construction, or pay any dividend on the capital invested. There is also an impression prevailing, and, in the main, it is a correct one, that canals are 'behind the age.' This difficulty is understated in the Company's Report. To assent to it does not invalidate the argument in favor of their enterprise. For, when carried to the Kanawha, it will cease to be one of the canals which are too sluggish for the present times. Mr. H. V. Poor is our authority for the statement that 'All the canals constructed in the United States, except the Erie, the Delaware and Raritan, and the Chesapeake and Delaware, may be considered as commercial failures.' While it is not controverted that canals can transport more tonnage and at a less cost than railways, the importance of the element of time can hardly be over-estimated in modern commercial transactions. People wish to make shipments so as to take advantage of fluctuations in the market, and the rule, 'Ship and draw,' is the one in commonest use. Unless canals find means to keep pace with the improvements in railways, we fear they will be left still more in the lurch. But great through canals between extremities, whose means of transportation are constantly overtaxed, will continue to be fully employed. To this class belongs the James River and Kanawha Canal. When finished, it will, without doubt, maintain a successful rivalry with the railways running east and west, and probably do the largest carrying trade in America.

The two pamphlets at the head of this article, fully exhibit the importance of the geographical position of Virginia. There are some things in the *Physical Survey Report*, however, which we cannot endorse. Its statistics (with a few careless exceptions) and the deductions drawn from them, are, in general, correct. But one of the objects with which the pamphlet is printed, and the manner in which the subject is reasoned and presented, are open to objection. It seems to have a double purpose; first, to awaken the Western public to a perception of its interest in the Virginia works, and, secondly, to urge on Congress to convert these into national works and to appro



priate money for their completion. By arousing the West some good will unquestionably be done; but as we have before said, an address to Eastern capitalists would probably prove more efficacious. There are some remarks, in this Report, on the canal as an investment; the burden of the argument, however, is, to urge that it be made a national route, free of tolls. This arrangement would repel private capital. We doubt the propriety of Commodore Maury's appeal to Congress. It is certainly the most out and out surrender of the doctrine of States Rights with which we have met. Whether Virginia, or any State, reconstructed or unreconstructed, is prepared to accept as one of the results of the war such an absolute surrender, we do not propose to argue. These works can be built by private subscription, and it is reported that financial arrangements have already been made for completing the Chesapeake and Ohio road. So long as we live under a Federal Government, we are fixedly opposed to seeing its revenues paid out to build up private enterprises. We presume, of course, that Commodore Maury does not propose that Congress, after building, should *own* and operate these works. If ever aid of this character was allowable, it was in the case of the Pacific Railroad; yet what a gigantic swindle on the Government that has already proved to be! Good observers declare, that by granting subsidies in this one case, public virtue has been sacrificed to private gain, and that this stupendous corporation is destined, at no distant day, to become the great corrupting influence in national politics. Conceive of the consequences of every road or canal, which had nothing more difficult to do than to prove itself a national necessity, being turned loose to make appeals, and to lobby, for Congressional aid. Even the corruptions of this degenerate day would soon pass for the purity of those 'good old times' of which all talk and few know.

So much for the objects of the Report. A word as to the manner of its execution. It would naturally be expected that a report on a scientific subject would deal only in statistics and hard, dry, conclusions. In effect, the eloquence of reports on questions of internal improvement, is for those men who go into rhapsodies over a column of figures, or at the

mention of a Gold Board report—men, the fibres of whose sensibilities are attuned to the touch of what Commodore Maury calls the ‘mute eloquence of figures.’ Commodore Maury, perhaps consistently with his purpose to put himself on Congress and the Western public, has popularized the presentation of his subject. He has not disdained to trick out his premises and conclusions with the gewgaws of rhetoric, and has not hesitated to make his pages do duty in carrying an occasional bit of sentimentality. Even appeals to the passions are used as a means of infusing heat into sums in addition and subtraction. So long as these things were confined to inoffensive ‘padding,’ it was well enough; but, in places, his appeals are unfair, and the logic to which they lead, inconclusive.

In comparing the rates of charges on freights by the Erie with those by the Virginia route, it is an unfair assumption to make the latter a national highway, free of tolls. To find the *absolute* cost over the Virginia line, in urging on Congress the advantages of making it a national route, this was altogether proper, but to proceed on such a basis in finding the *comparative* cost, is unfair. Congress has made appropriations for opening certain parts of the Northern route, but has made none for opening that of Virginia; and it is presumable that the former will be made a national route before, or as soon as, the latter. There are many more interests and much more wealth at the extremities and along the line of the Lake route, which can be brought to bear in controlling Congressional subsidies. These are the things which really determine legislation.

Commodore Maury is unfortunate in proving to the West the prostrated condition of its industrial interests. He seems to disregard the fact that the bulky and unsaleable products of the soil can be converted into less bulky and more valuable commodities. Grain is turned into meat, and when packed into barrels, occupies such small space in proportion to value, as to bear distant transportation. The West is really among the most prosperous countries in the world. Its astounding growth, the absence of pauperism, and the certain and high rewards of labor, all establish this proposition. Owing to heavy taxation, the pressure of the national debt, the condition



of the currency, and the consequent 'tightness' of business, there are more complaints of distress than formerly; but they are heard alike from all parts of the country. It is indeed difficult to persuade a people living in plenty, that they are poor and wretched. There are in every community a few rich people who live in the sad conviction that they are poor; but as we have more regard for the poor man who thinks himself rich, we hope this attempt to convince a rich people of their pauperism will fail.

In the seven years ending June, 1867, the exports of Great Britain increased thirty per cent.; those of France increased forty-three per cent.; and those of the United States fell off ten per cent. From this state of things, Commodore Maury infers that the United States lags behind her commercial rivals, (pp. 55, 56, 57.) This conclusion is unwarranted by the premises. Neither the quantity of a country's exports or its imports, nor the balance of trade in its favor or against it, determines its prosperity; and this is so fixed a principle of political economy, that no one now questions it. As a matter of fact, the United States have during that time carried on an intestine war of colossal magnitude, and have incurred a gigantic public debt; and yet, all the while, the Northern section presented an aspect of prosperity superior to that of France or England. Since the war, the North has shown no marked symptoms of declining prosperity, and the South, when we consider the loss of property from the war and the revolution of the labor system, has risen from her prostration and poverty with an unprecedented rapidity. This recuperation is felt everywhere, except where, from bad seasons, the crops have failed, or where the staple is tobacco, that having been at a low price since the war. Commodore Maury says that this falling off on the part of the United States is not due to the dilapidated condition in which the South was left by the war; for the exports of that section were, in 1867, *sixty-nine per cent.* of those of the whole country. This in itself might have shown that the amount of exports is no index of prosperity; for 1867 was not a prosperous year at the South, the ravages of the cotton caterpillar having been very extensive. Nor was the

prosperity of the South that year greater than that of the Northwest, whose exports were comparatively insignificant.

But after inferring that the United States lagged behind its commercial rivals, Commodore Maury goes farther, and infers that this is due to the fact that the Western States are pent up and cut off from the sea. This argument is so unique that we give it in his own words. Having stated that the Southern States export at the rate of twenty-one dollars per inhabitant, and the pent-up States at the rate of two dollars and ten cents, he proceeds:

'The striking geographical fact that, with its suggestions, meets us here is, that one group of States front on the sea and have convenient access to the world, while the others are pent up, cut off from the sea, and so situated that when the farmer there sends one measure of corn to market, he has to send two others along with it to pay its expenses.

'It may be argued that those States with the cheap and convenient highways to the sea, produce cotton, while those that are cut off from it have corn for their staple. But to make fair comparison, suppose the Southern planter had to pay two bales of cotton to get one to seaboard.' (p. 57.)

This amounts to saying that the inaccessible situation of the West, and not the character of its staple, prevents the exportation of that staple. The unfairness of this 'fair comparison,' lies in the fact that, five bushels of corn are as costly to transport as a bale of cotton, and more inconvenient to handle. According to the above statement, the Western farmer receives only five dollars for every fifteen dollars worth of produce sent to market. Suppose a bale of cotton had to be exported from the same place. The bale is worth from seventy-five to one hundred dollars, and the expenses of its transportation from ten to twenty dollars. So that, while the Western farmer receives value for only one-third of his produce, he would, if he cultivated cotton, realize more than five-sixths of its value. Thus we see that he who urges 'that those States with the cheap and convenient highways to the sea produce cotton, while those that are cut off from it have corn for their staple,' is correct in inferring that it is not alone the pent-up condition of the West that prevents larger exportations from it. Whatever be the extent of transportation furnished to the West, its exportations, from the very nature of its products,



must be limited, in comparison with those of the South. Fortunately for it, prosperity does not depend on the amount of exports.

To sum up the defects of this argument. The want of prosperity of the United States is assumed against the facts of the case. A fallacious index, the deficit of exports, is employed to prove this false position; and as this deficit exists in the West only, it is necessary to infer, according to the first assumption, that the South was very prosperous in 1867, and the West not so; neither of which positions is correct. Then the conclusion is reached, that the inaccessibility of the West, by diminishing its exports, diminishes the prosperity of the whole country, and is the cause of the lagging of the United States. A blow, by the way, is dealt at those who assert that the character of Western staples, as well as its pent-up situation, has something to do with the comparatively small quantity of its exports. Here we have every vice of bad reasoning—false premises, a false conclusion, and tripping by the way.

One of the amusing sentimentalities of Commodore Maury's book, is an appeal to the gratitude of the North-western people and of Congress to build these routes, because Virginia released to the United States the land out of which those States were carved. This appeal is printed in italics. We doubt whether this gives Virginia any claim on the gratitude of those 'erring children;' but even if it did, such an appeal to a tribunal which has just lopped off West Virginia from the Old Dominion, can hardly be expected to meet a very gushing return.

We have dwelt longer than was our intention on the defects of Commodore Maury's Report. Indeed, we are of the opinion that the whole scope of it is a mistake, and that it is labor and time wasted on a beaten track. Edgar A. Poe used to deliver a lecture on 'The Universe.' He commenced by gradually putting aside, first one part, and then another, of his subject, for discussion at a more convenient season, until, at last, he narrowed it to the wonders contained in a drop of water. Commodore Maury reverses this process. Starting with the physical survey of Virginia, he goes back to give an account of the commercial peculiarities of the oceans, and the connections of

other States and foreign countries with Virginia. If a physical survey of Virginia includes this, it would be difficult to say why it does not also include a preliminary treatise on Astronomy; for Virginia has connections with the world, and the world with the solar system. A preliminary and concise statement of the advantages of the geographical position of Virginia would have been well enough, as a short introduction to what is more wanted—information about its climate, soil, productions, and mineral resources.

The existence of slavery, it is admitted, turned emigration from the South; and, accordingly, while the boundless 'West' was filling up with rapidity, we find the Southern States, although nearer market and with a more genial climate, but thinly settled. Now, however, slavery is no more, and the South is open to emigrants. It wants emigrants. It wants them, to fill up the country; to drain it, and make it more healthy. It wants labor, to build its roads, and to replace what is lost by emancipation. It wants men accustomed to the free labor system, to inoculate its farmers with the capacity for managing farming operations under that system. It wants men, to educate capital and labor, so that they may adjust themselves to the exigencies of the new situation.

Three classes of difficulties contribute to shut off this emigration: first, those of a political character; secondly, want of knowledge of the climate, productions, &c., of the country; and thirdly, want of an organization for diffusing that knowledge at home and abroad. To meet these last two difficulties we conceive to be the object of the physical survey of Virginia. Capital and emigrants now stand gazing into the *terra incognita* of the South. We only now appreciate how ignorant the outside world was of the South prior to the war. A Northern editor recently visited Virginia, and on his return wrote just such a descriptive account of the people and country as we should expect from an explorer into an unknown region. Indeed, one of the most noticeable things of the civil war was, the discovery of Virginia and the Southern States by the Yankees. True, they formerly had such a land put down on their maps; but a vague rumor prevailed among them that the



existence of bowie knives and revolvers made it impossible for a Northern man to become acclimated in that outlandish region. It was a sort of undiscovered country whence no traveller returned. Even now, there is great doubt as to the temper and manners and customs of the natives, and the best method of civilizing them and teaching them 'progress.' With their characteristic sensitiveness to the faintest vibration running along any of the nerves centering in that ganglion called the pocket, our 'Northern brethren,' as they look across the Potomac, talk about 'coal' and 'mineral wealth' and 'water power.' They are also beginning to look on the natives as a milder set of barbarians than they formerly appeared, and are pushing their inquiries, with a view to emigration, and to investments of capital. Now, while interest is concentrated on this 'new' country, is the fortunate moment for disclosing its great natural advantages, and thus attracting men and capital from other States and from abroad.

We cannot resist the opinion that, if Commodore Maury had occupied the time and used the money he has expended on this Report, in gathering from all available sources the knowledge now possessed, but not collected, 'as to the climate, soil, and productions of the State, its mineral resources, water power, and manufacturing facilities, to the end that industry might be stimulated, enterprise encouraged, the material prosperity of the people advanced, and the general welfare of the country promoted,' he would have done a far better work than he has done, and a work, too, in the nick of time. If to this report he had added, by an examination and comparison of county maps, engineers' reports, and United States and Confederate army records, a neat, reliable map, instead of the rough, inaccurate one he has given us, he would have done another most excellent work, and one much needed. When the people of the North and of Europe know what a glorious domain Virginia is, they will flock into it and fill up her counties, and unite with her people to build up her cities, and stretch the arms of her commerce to the remotest West, and thus realize the grand possibilities of her geographical position.

ART. VIII.—*Battle of Ball's Bluff.*

[The following Report of the Battle of Ball's Bluff, which is believed to be the only one now in existence, and which has certainly never before appeared in print, we give entire, and in the words of the gallant officer by whom it was made. His name is a voucher for its accuracy. We shall always be glad to rescue such documents from obscurity, and give them a place among the permanent records of the late war.]

## HEADQUARTERS CAVALRY CAMP,

*Near Leesburg, Va., Oct. 28, 1861.*

## GENERAL:

I have the honor to submit my report of a battle with the enemy, which took place near Leesburg on the 21st instant.

At 8 o'clock A. M. it was reported to me that the enemy was crossing the Potomac River below 'Smart's Mill,' and about two (2) miles distant from Leesburg. Their skirmishers of two companies were advancing rapidly on the town, when they were attacked and driven back by Capt. Duff's company of the 17th Mississippi regiment. The loss of the enemy in this engagement was two killed and three wounded. Soon after the enemy was driven back, I arrived on the ground with four (4) companies of cavalry, and assisted Capt. Duff in getting up the enemy's wounded.

At nine (9) o'clock I received an order to report with my cavalry to you at Fort Evans. After obeying this order, you gave me permission to take my cavalry near the enemy's position; in order to make an attack should he again advance. I concealed the cavalry in a ravine near Mr. Trunnell's house, ready to make a charge when an opportunity offered.

The enemy at this time was under cover of the thick woods between the river and Leesburg, and reported by the prisoners just taken to be six (6) full companies of one hundred (100) each.

At eleven (11) o'clock I determined to attack the enemy and, if possible, to drive him from his strong position, and sent



you a dispatch to that effect. Capt. Campbell, with two (2) companies of the 18th Mississippi Regiment, placed himself under my command. I then sent an order to Capt. Duff, who had taken his position about three-quarters of a mile on my left, to hold his company in readiness to attack the enemy's right flank. As soon as sufficient time had elapsed for Capt. Duff to receive the order, I advanced towards the enemy's position; and when I arrived to within a few hundred yards of him, one (1) more company joined me by your order. My whole command then consisted of three (3) companies of cavalry, commanded respectively by Capt. W. B. Ball, Capt. W. W. Meade, and (Capt. Adams's company) Lieut. Moorehead, and four (4) companies of infantry, commanded by Capts. Campbell and Wellborn of the 18th Mississippi Regiment, Capt. Duff of the 17th Mississippi Regiment, and Capt. Fletcher of the 13th Mississippi Regiment, making in all about two hundred and sixty (260) men. Capt. Campbell was ordered to deploy one of his companies, Capt. Wellborn, as skirmishers, in order to feel the enemy's position. The other companies were directed to advance in the following order: Capt. Campbell on the right, Capt. Duff on the extreme left, Capt. Fletcher's infantry and the cavalry in the centre.

Capt. William B. Ball was placed in command of the cavalry, but, as I approached the position of the enemy, I found it was impossible to charge with the cavalry, as there was a strong and high fence between my command and the enemy. I then ordered Capt. Ball (at his request) to dismount his company and fight on foot. The attack was then made, and a brisk fire was kept up, through the fence. Finding the enemy was not disposed to fall back, I ordered a charge over the fence, which order was promptly obeyed; and as soon as a portion of the fence could be torn down I leaped my horse over, followed by Capt. Ball, Lieut. Wooldridge, Lieut. Clarke, and Lieut. Weisinger, of Capt. Ball's Cavalry, Lieut. Baxter, of Loudon Cavalry, and Mr. R. L. Hendrick (civilian,) of Mecklenburg, Va., who kindly volunteered his services.

The enemy was soon driven back from his first position, but a heavy fire was kept up from the woods, to which he retreated.

Fearing my small command would be led into an ambushade, I ordered it to fall back, and take position in rear of the fence it had just passed, and sent to you for reinforcements. As your position was at Fort Evans, about a mile distant, I had time to gather up the enemy's wounded, and two prisoners, including one captain, and send them to Leesburg.

In this charge on the enemy, I would respectfully call the attention of the General commanding to the officers who were with me. Capt. Ball deserves particular notice for his coolness and words of encouragement to his company and the men of the infantry command, he being at one time exposed to a heavy fire, in carrying orders. Capt. Campbell, and the officers of the infantry command, also deserve much praise for their coolness in the charge. Lieuts. Wooldridge, Clarke, and Weisiger, Messrs. Hendrick and Peters, (civilians,) were among the first in the fight, and did good service. Lieut. Weisiger, my acting adjutant, had his horse shot in the head whilst carrying an order, just before the engagement commenced. These officers I particularly mention, because I had an opportunity of witnessing their individual courage and coolness.

At twelve o'clock you sent me the 8th Virginia Regiment, commanded by Col. Hunton, and said you would send me artillery; but none came. I again advanced on the enemy in the following order: Capts. Campbell, Wellborn, and Fletcher's companies in front, with skirmishers in advance; and on their right these companies were supported by Col. Hunton's Regiment. Owing to the thick woods and roughness of the ground, these companies were lost sight of for a few moments, and Col. Hunton's Regiment took its position in front, with the three companies first named on the right. Capt. Duff's company advanced on the left with skirmishers in advance, supported by Capt. Ball's cavalry dismounted. After marching several hundred yards through the dense woods, our troops were fired upon by the enemy's skirmishers, who were concealed behind trees and in deep ravines. At the same time a constant fire was kept up by the enemy's artillery, which had just been landed on this side of the river, throwing shell and round shot; the enemy's artillery was also playing on us from the opposite side of the river.



At 1½ o'clock I left my position on the left and rode through the thick woods to where Col. Hunton's Regiment was stationed, and requested him to throw out his skirmishers to the right and left, in order to prevent the enemy from flanking us and getting in our rear. Col. Hunton, like a true gentleman and soldier, granted my request, notwithstanding I was his inferior in rank. I also suggested to him to make the men crawl on their hands and knees to the brow of the hill, just in front of him, in order to make a more successful attack on the enemy, who was in the open field just beyond, and not more than fifty or sixty yards distant; but before the Colonel had time to place his men in this position, the enemy opened a terrific fire on his command, with musketry, grape, and shell. To this terrible fire Col. Hunton gallantly replied, and soon drove the enemy back to his strong position behind the bluff at the river, killing all the cannoneers at the guns. At this time (3 o'clock) you sent me a message, that you would reinforce me with another regiment. The 18th Mississippi, Col. Burt, then came up, and took position, I think, on Col. Hunton's right, where the woods were very thick. The heavy fire of the enemy was still kept up, and was replied to with telling effect by the 8th Virginia and 18th Mississippi Regiments. Here, the gallant Col. Burt fell, mortally wounded, about 4 o'clock. The command of the 18th then devolved upon Lieut. Col. Griffin, who captured the rifle cannon. At 5 o'clock you sent me the 17th Mississippi Regiment, Col. Featherston, which I ordered forward to the relief of Col. Hunton, whose men had been fighting for more than four hours. You also sent me word by my Adjutant, Lieut. Weisiger, that you would reinforce me as long as I desired it. At the same hour the 13th Mississippi Regiment, Col. Barksdale, was ordered up to me, but as the enemy had been driven back to the bluff, and our forces were holding their position, I sent an order to Col. Barksdale to take his former position, which he held most of the day, keeping the enemy's extreme left flank in check. This regiment, although not in the engagement on the 21st, held a most important position, and prevented the enemy from flanking us. About 5½ o'clock Col. Hunton's 8th Virginia Regiment charged, and captured

two of the enemy's six-pound howitzers. The regiment was without ammunition at the time.

Between 5 and 6 o'clock I rode up to Col. Hunton, and asked him if I could render him any assistance, observing that his men were completely exhausted, and lying flat on the ground, *within one hundred and twenty-five yards of the enemy*, but under cover of a small hill. The Colonel replied that he was without ammunition, and that his men were broken down from fatigue and hunger. It was at this time that I sent my Adjutant to you for ammunition and provisions; and, if provisions could not be gotten, to send a barrel of whiskey, to refresh the men. I told the Colonel I would send to you for what he required, and advised him to let his men rest until they could be refreshed. During the conversation between Col. Hunton and myself, a part of the 17th and some of the 18th Regiments (about fifty feet in advance of Col. Hunton's right) were engaging the enemy, and receiving his heavy fire like regular soldiers. I think these were the last volleys that were fired; and I left the battle-field to collect my scattered cavalry, most of which had been guarding the enemy's flank during the day. At 8 o'clock P. M. I reported to you, at your headquarters, in Leesburg.

The force under my command on the 21st instant was composed of the following regiments and detachments, viz:

|   |     |
|---|-----|
| Three (3) companies of Va. Cavalry, numbering about . . . | 70  |
| The Eighth Va. Regiment, . . . . .                        | 375 |
| The Eighteenth Miss. Regiment, . . . . .                  | 500 |
| The Seventeenth Miss. do. . . . .                         | 600 |
| One company of the Thirteenth Miss. Regiment, . . . .     | 60  |

|                  |       |
|------------------|-------|
| Total, . . . . . | 1,605 |
|------------------|-------|

Our loss—in killed (35) thirty-five, and wounded (115) one hundred and fifteen. To my knowledge, there was no officer killed in the action. Col. Burt was mortally wounded, and has since died.

The enemy's force engaged in the action was, as near as I can estimate it, about four or five regiments, companies full, with three pieces of artillery on the Virginia shore, and several



pieces on the Island. From the report of prisoners taken in the battle, the enemy numbered four thousand. Independent of this force engaged, the enemy had three or four regiments of infantry and one or two squadrons of cavalry on his extreme left, about two miles distant, at Edwards's Ferry. This command was, as I have previously stated, held in check by Col. Barksdale's 13th Mississippi Regiment.

I think I can safely estimate the force of the enemy's infantry and cavalry on this side of the river, at seven regiments of infantry and one or two squadrons of cavalry. The number of pieces of artillery, except those captured, is not known. The prisoners taken in the action, reported the companies of infantry to average one hundred men. The following regiments were represented in the battle, prisoners having been taken from each of them, viz: 1st California Regiment; 42d Tammany Regiment, New York; 15th Massachusetts Regiment; 19th Massachusetts Regiment; 4th Massachusetts Regiment; 20th Massachusetts Regiment; New York Zouaves, and artillery. Two or three regiments of infantry, with cavalry and artillery, at Edwards's Ferry.

The following is the loss of the enemy, as near as can be ascertained, including two Colonels and one Major:

|                                   |             |
|-----------------------------------|-------------|
| In killed, . . . . .              | 200         |
| In wounded, . . . . .             | 500         |
| In drowned, . . . . .             | 300         |
| In prisoners, (privates,) . . . . | 692         |
| In prisoners, (officers,) . . . . | 24          |
|                                   | <hr/> 1,716 |

The number of killed was taken from one of the Federal officers.

The number of arms taken from the enemy is about 1,500, besides a large number of cartridge boxes, and clothing of different kinds. The number of prisoners taken by each regiment, will be stated in the regimental reports. The cavalry captured about 75 prisoners on the 22d instant, and brought them into Leesburg.

Before closing my report, I would respectfully call the attention of the commanding General to the gallant conduct of the officers, non-commissioned officers, privates, and citizens, who were with me during the day.

Too much praise cannot be given to Col. Hunton and Capt. Ball, for the manner in which they managed their respective commands. Lieut. Baxter, of the Loudoun Cavalry, deserves praise for the gallant manner in which he made a charge, with ten men, on the two companies of the enemy early in the morning, while assisting Capt. Duff.

Mr. White, of Col. Ashby's Cavalry, volunteered his services during the day. I never witnessed more coolness and courage than this young soldier displayed. Exposed to the heaviest fire of the enemy, he rode in front of a part of the 17th Regiment, cheering and encouraging the men.

Sergeant Strother of the Madison, Acting Sergeant Major Baugh of the Chesterfield, and private Toler of the Loudoun, Cavalry, rendered good service in carrying orders.

I have also to report that, on the evening of the 22d, after I had executed your order to receive the enemy's flag of truce, for permission to bury the dead, some of my cavalry pickets who were stationed near the river, were fired into several times, by the enemy on the opposite side. This disgraceful act was committed by some of the troops under the command of Col. Hinks, of the Federal army.

In submitting this report to you, I have only stated what came under my personal observation, except in those cases in which I have taken the reports of officers and men who were taken prisoners by us.

Feeling the position I held during the day a responsible one, and one not at all coveted by me, I sent an officer to you at dark, with the request that you would send your orders to Col. Hunton, as he ranked me. Up to this time, you had been sending all your orders to me, which compliment I highly appreciated, but preferred your paying it to Col. Hunton.

I am sir, very respectfully,  
Your ob't servant,

W. H. JENIFER,

*Lt. Colonel, Commanding Cavalry, 7th Brigade.*

To Brig. Gen. EVANS, commanding 7th Brigade.

Copy: D. K. WEISIGER,  
A. Adjutant.



ART. IX.—NOTICES OF BOOKS.

I.—THE ATLANTIC MONTHLY: Its Charge against Byron.

We were contemplating an article on the character of Lord Byron and had partly prepared it for publication. But the following Poem, by George H. Miles, which has just been handed us, will, we think, better accomplish our object—which is not that of vindication or of condemnation, the materials for either being insufficient—than any formal examination.

BYRON.

Let him rest in his shame and splendor,  
In splendor and shame let him lie;  
Whisper low, for the grave should defend her,  
Curse no more, for he cannot reply.  
'Tis not well to stand over a body  
From which a great soul has just fled,  
And smite the poor lips till they're bloody,  
For the sake of a sin that is dead.

O pierce not into their mystery,  
O pry not into the gloom;  
Leave the truth to the slow test of history—  
The seals are too fresh on the tomb.  
No word on the vault need be graven  
Till the hinge has had time to rust;  
And we—we will keep off the raven,  
At least till the dead are dust.

Then let them steal to the churchyard,  
And the skeleton secret exhume,  
Let them ponder, and finger, and search hard,  
And blazon the settled doom.  
But not now, in the name of glory,  
In God's good name, not now,  
When the hand must be fouled and gory  
Ere it rifles the laurelled brow.

For a poet, though he may grieve us  
At times with a baleful lay,  
Is ever the last to leave us,  
The last that we let decay.  
The syren song we inherit  
Keeps sounding so fresh and near,  
That we seem, both in flesh and spirit,  
Still standing beside his bier.

And why should a libel borrowed  
 From oblivion stain his corse,  
 When each line on the cold white forehead  
 Shows the finger of remorse?  
*He* was an archer regal,  
 Who laid the mighty low,  
 But his arrows were fledged by the eagle,  
 And sought not a fallen foe.

With the front of a lost Archangel,  
 He braved a frowning world,  
 At maiden, man, and evangel,  
 His fiery scoffing hurled:  
 Railing 'gainst earth and Heaven alike,  
 'Till the haughty eye grew dim;  
 But he never lifted a shroud, to strike,  
 As hath *twice* been done to him!

And why should a ghastly whisper  
 Be swelled to a common cry?  
 For beldam lips to lisp, or  
 Smother with half a sigh?  
 For virgins wise to utter,  
 Unriddling *MANFRED's* wail,  
 For *SELIMS* sleek to mutter  
 Should *ZULEIKA* turn too pale?

Why conjure a phantom terror  
 From the ashes of the great,  
 And, worse than vilest error,  
 Speed the horrible debate?  
 Why, when the world is listening  
 To minstrels robed in light,  
 Wile us back to the morbid glistening  
 Of a Spirit of the Night?

He has met the final audit,  
 He has faced the Judge Supreme,  
 Man's malison or plaudit  
 Will but reach him as a dream.  
 Wait till the lifelong beating  
 Of each bosom is laid bare,  
 At that vast sepulchral meeting,  
 And then—*stone* him if you dare!

*Baltimore, September, 1869.*

2.—A LETTER TO THE ALUMNI OF DARTMOUTH COLLEGE, ON ITS HUNDREDTH ANNIVERSARY. By Nathan Lord. New York: Published by Hurd & Houghton. Cambridge: Riverside Press. 1869.

It does not often happen to the President of an American College to address its Alumni on its Hundredth Anniversary,



and to address them as one who 'for forty-two successive years' has been one of its Trustees, and 'for thirty-five years' its President, and at whose hands 'the great majority' of its surviving graduates, and 'more than half' the whole number, living and dead,<sup>1</sup> have 'received their diplomas.' Such a consilience of circumstances gives Dr. Lord a special claim to be heard, and we thank him, in the name of Christianity and of sound philosophy, for availing himself of it. We thank him for *lifting up* his voice—not, we trust, on the present occasion, *vox clamantis in deserto*<sup>2</sup>—and for lifting it up *with strength*, when so many are *afraid* to speak out the truth that is in them, and so many more are *not* afraid to speak out the falsehood that should not be in them—still less, come out of them.

The key-note to the whole Letter is sounded in the following paragraph:

'When secret societies were likely to become the fashion, as they have since become extensively the passion, of American Colleges, their common parent—the *Society of the Phi Beta Kappa*—took itself out of its bad predicament. It renounced its cabalism, and interpreted its symbols. Many considerate persons had become distrustful of the fallacy which those symbols represent—that philosophy is the guide of life<sup>3</sup>—and were fearful of its effect. Others, less thoughtful, or less scrupulous, were yet willing to open the question for discussion. The Society still retains its name, not, however, as a sign, but for its dignified associations. The idea which its symbols suggest, few would now choose to maintain seriously as a proposition. It is remembered, and will never, it is hoped, be forgotten at Dartmouth, that Christ denies all mastership and rabbinical authority but his own. It is remembered that Paul, when he criticised the philosophy of old Greece—the highest and proudest of any period of earth—which our modern wisdom can only imitate afar off, and with greater confusions, emphatically denounced it as "Foolishness with God."—p. 5.

We would gladly give more extracts, though where to begin, or where to end, short of transferring bodily the whole eighty-seven pages, would be no easy matter to determine; but want of space compels us to stop; and this is a practical, though unsatisfying, extrication from our dilemma.

3.—SEEN AND HEARD. Poems or the Like. By Morrison Heady. Baltimore: Henry C. Turnbull, Jr. 1869.

Why Mr. Heady allowed the last three words of the title to accompany the other four, we cannot understand, for if his be

<sup>1</sup> 'Two thousand six hundred and seventy-five,' out of 'four thousand seven hundred and fifty-nine.'

<sup>2</sup> Motto of the College.

<sup>3</sup> Φιλοσοφία Βίου Κυβερνήτης.

not poetry we know not what is; and poetry, too, of a high order. Take a stanza or two from *The End of Time; a Vision*—evidently suggested by, and modelled on, Campbell's *Last Man*, and see if it do not compare favorably with it:

'The twilight dim of man on earth  
 In death's black night was lost,  
 And all the glory he put forth  
 Was gone, like morning frost.  
 Decay had laid a mouldering hand  
 On all those works, so vast, so grand,  
 Reared by a mighty race;—  
 Temple and tower and pyramid  
 In their own dust lay darkly hid;  
 Even ruin showed no trace.  
 Now breathed no blossom-scented morn,  
 No eve with dreamy spell;  
 No seasons nursed the golden corn,  
 Nor rain nor snow-flake fell.  
 No sound broke on the pulseless sleep,  
 No blast howled o'er the stagnant deep,  
 And ocean spake no more;  
 His voice of wrath was mute in death,  
 No more he tossed with stormy breath,  
 Or scourged the trembling shore.'

'The author of these poems,' as we learn from the Preface, 'was born in Spencer County, Kentucky, and is now nearly forty years of age. When about sixteen years old, he suffered an injury to one of his eyes which resulted in total loss of sight in both, and this calamity was soon aggravated by loss of hearing. By the aid of a trumpet he can yet distinguish some familiar voices; but even this slight communication with the external world is rapidly failing him.'

It is to this that we owe the opening poem of the volume, *The Double Night*, in four parts, of from fifty to a hundred lines each, entitled, respectively, *Darkness*, *Silence*, *To the Shades*,—namely, of Milton and Beethoven,—and *Resignation*. The poem opens thus:

'Go, bring the harp that once with dirges thrilled,  
 But now hangs hushed in leaden slumbers,  
 Save when the faltering hand untimely chilled  
 Steals o'er its chords in broken numbers.



It hangs in halls where shades of sorrow dwell,  
 Where echoless Silence tolls the passing bell,  
 Where shadowless Darkness weaves the shrouding spell  
 Of parting joys and parting years.  
 Go, bring it me, sweet friend, and ere we part,  
 A lay I'll frame, so sad, 'twill wring thy heart  
 Of all its pity, all its tears.'

The last of the four parts—*Resignation*—begins thus :

'PENSYLLA, look ! With tremulous points of fire,  
 The sun, red sinking, lights yon distant spire ;  
 O'er leafy hill and blossoming meadows,  
 Spreads wide and level his departing beams,  
 Then sinks to rest, as one sure of sweet dreams,  
 'Mid pillowing clouds and curtaining shadows.  
 Night draws her lucid shade o'er sky and earth ;  
 Solemn and bright, Heaven's starry eyes look forth ;  
 The evening hymn of praise and song of mirth  
 Rise gratefully from man's abode.  
 O Night ! I love her sombre majesty !  
 'Tis sweet, her double solitude, to me !  
 Pensylla, leave me now ! Alone I'd be  
 With Darkness, Silence, and my God !'

The longest poem in the book, extending through more than half the volume, is YOONEMSKOTA, an *Indian Idyll*. It enters as fully into Indian modes of thought, and feeling, and speech, as Longfellow's *Hiawatha*, and is, in our opinion, fully equal to it in everything, except, perhaps, artistic finish. Nor is it an imitation ; for, in the first place, it is written in several different measures, only a very small portion of it being in trochaic dimeter ; and, in the second place, parts of it date back to 1852, which is three or four years earlier, we believe, than the publication of *Hiawatha*.

We give one or two extracts, merely premising that the measure in which they are composed consists of (what passes with English-speaking men for) two dactyls and a trochee, varied occasionally by a trochee and two dactyls :

'Ready he stands with the pine torch,  
 Greedily waiting is Black Wolf  
 For the sweet moment of moonrise,  
 When he may kindle the death-pile,  
 And of revenge have his wolf's fill.  
 But he delays for a brief space,  
 Keen as he is for revenge : why ?

Look, Yoonemskota ! A light form,  
 Leapt as it were from the round moon  
 Down on the top of the bald peak,  
 Suddenly stands by the tall brave.  
 Has not the like of that light form,  
 Standing up there in the moonlight,  
 Oft been before thee by dream-light ?  
 Once been before thee at sunset ?  
 Say, what manner of thing be it ?  
 Is it that spirit of sunset  
 Sent to abide in the night shade  
 " Till it is over and all still "  
 Then to conduct thee, by dim paths,  
 Over the borders of ghost-land ?  
 Or but a beautiful mist-shape,  
 Such as are met by the lone soul  
 When it is wandering by dream-light  
 Over the realms of the Unseen ?  
 Maybe a maid of the wild wood,  
 Fair as the morning, with tall form,  
 Light as the fawn with white foot ;  
 Hair like the locks of the storm-cloud,  
 Eyes like the depths of the starred sky ;  
 Maybe 'tis this, and perhaps—that !  
 Who knows ! Who knows !

Pp. 84—86.

Out at the door of the great lodge,  
 Silent as silentest night shades,  
 Captive and maiden now steal forth.  
 Swift as the shapes in a still dream,  
 Crossed they the border of moonlight  
 Into the gloom of the wild wood ;  
 Gliding on over the dead leaves,  
 Lightly as treading on thin ice  
 Over the face of a deep stream.  
 Hist ! Is that the alarm-cry  
 Rending and shaking the night air ?  
 No ! 'Tis only the gray owl  
 Rousing the echoes, to tell how  
 Hates he the shine of the full moon.  
 Hist ! Is that the alarm-cry ?  
 No ! That is only the wild-cat  
 Screaming his rage at the young fawn  
 That has evaded his fell spring.  
 Hist ! But there's the alarm-cry !  
 No ! 'Twas only the gaunt wolf  
 Howling his rage at the elk-stag  
 That has eluded his fierce chase.

Pp. 108, 109.



After *Yoonemskota* comes *The End of Time*, (already spoken of,) followed by several shorter pieces, winding up with *The Apocalypse of the Seasons—A Spring Morning, A Summer Noon, An Autumn Evening, A Winter Night*; the whole rounded off with *Dawning Glimpses of Immortality*. The description of that apparently unpoetical thing—the Reaping Machine,—in the *Summer Noon*, is equal to anything in Thompson. We wish we had space for it; but we must content ourselves with advising our agricultural readers, of whom, we are happy to say, we have a large and increasing number, to get the book and read it for themselves. The *Apocalypse* is introduced by a brief *Preface*, which shows that Mr. Heady can write beautiful prose as well as poetry. We hope, therefore, to greet, before long, the *Life of Columbus*, which he ‘has ready for the press,’ and the great poem of *Tecumseh*, which he more than half promises us, in the opening lines of *Yoonemskota*.

We believe this volume is Mr. Turnbull’s maiden publication. It is beautifully gotten up, and will bear comparison with the best productions of the American press.

4.—POEMS. By Theophilus H. Hill. New York: Hurd & Houghton. 1869. (Baltimore: H. Taylor & Co.)

These Poems, ‘Blown from a pipe of Carolina reed,’ require criticism, and will bear it; which last is more than can be said of much that passes for poetry now-a-days. In saying that they will bear criticism, we refer to those of the first division, constituting three-fourths of the whole. Those of the remaining one-fourth, the author tells us, are *Humorous*. We are indebted to him for the information, as otherwise we should have been in the dark in regard to most of them. There is a grain of humor in the first foot-note to the ‘*Parody*’ on *Lucile*, but none, that we can see, in the parody itself. Still less can we discover any in the *Serio-Comic Poem*, of nineteen pages, ‘Delivered before the Pittsboro (N. C.) Scientific Academy;’ or in the shorter piece having for title, *Qui capit, facit*—that is to say, *Who takes, makes*—which, as we fail to ‘take,’ we cannot be expected to ‘make’ anything of. Indeed, had we fallen upon these pieces at the outset, we should infallibly have

thought the 'pipe of Carolina reed,' from which they were 'blown,' no better than a pitch-pipe; which, though it may embrace in its compass all the notes of the poetical gamut, is not, to our apprehension, particularly melodious. The lines, *To a Lady, on Receiving flowers*, and those entitled, *Clouds with Silver Linings*, have some touch of humor in them, and are by no means bad; and *Taking a Snooze*, is decidedly good, though out of place in this part of the book. These constitute the whole of the so-called humorous poems. Passing from them to the consideration of the others, we proceed to specify certain faults, mostly rhetorical or prosodical.

### 1. Wrong accent:

'Oases in the gloom.'—p. 61.

'The wood-land wilds are starred with bright oases.'—p. 21.

'Come and scatter bright oases

In this gloomiest of places.'—p. 98.

Tennyson has the same false accentuation in one instance; but for this, the latest edition of *Webster* would hardly have admitted it, even as a possible alternative.

'Can fashion with consummate talent and tact.'—p. 130.

Even *Webster* does not admit this accentuation of the adjective.

### 2. Wrong syllabication.

If 'words are the counters of wise men,' the wise prosodian will take care not to make them count too much. Certainly he will not turn one syllable into two, in the following fashion:

'Myriads of fire-flies.'—p. 68.

'A twinkling swarm of fire-flies.'—p. 113.

'Gather flowers—blushing flowers—

Which, at present, blow;

Leave the buds, they are not ours,—

They for others grow.'—p. 50.

But perhaps the 'flowers' and 'ours' will, in the words of *Euterpe*, in the *Serio-Comic Poem*,

'—married, not mated, despite all your trouble,

Deny they had ever intended to double!'



## 3. Affectation of certain words and associations of words :

- ‘Who unravel *opalescence*.’—p. 6.  
 ‘What *opalescent* mazes played.’—p. 15.  
 ‘To every care some *sweet nepenthe* bring.’—p. 74.  
 ‘With what *sweet nepenthe* fraught.’—p. 101.  
 ‘And should its feeblest *scintillation* fall.’—p. 63.  
 ‘From single *scintillations* shoot.’—p. 112.  
 ‘Sweetly *scintillant* again.’—p. 68.  
 ‘In *scintillant* attire.’—p. 79.  
 ‘Love’s *scintillant* unchanging star,’—p. 104.  
 ‘With her *scintillant* smiles,’—p. 115.  
 ‘Begirt by folds of billowy *mist*  
 Suffused with purpling *amethyst*.’—p. 15.  
 ‘Thou dost change the morning *mist*  
 Into sparkling *amethyst*.’—p. 39.  
 ‘To where—withdrawn into a *mist*  
 Of crimson haze and *amethyst*.’—p. 58.  
 ‘She leaveth me alone to mope—  
 A melancholy *misanthrope* !’—p. 65.  
 ‘Leaving me alone to mope,  
 A repining *misanthrope* ?’—p. 97.

## 4. Miscellaneous :

- ‘Whose touch will nerve thy failing hand  
 With *supra-mortal* power !’—p. 42.

For ‘*supra-mortal*,’ read, ‘more than mortal.’

- ‘*Renewed—Rejuvenated* trees  
 Resume their leafy liveries.’—p. 56.

The first of these lines is tautological and inharmonious.

- ‘Like the echo of the sea,  
 In the shell upon the shore,  
 She abideth, evermore  
 Murmuring of heretofore,  
 In my heart—a stranded shell,  
 Dashed by passion’s stormy swell,  
 On the *burning beach of hell* !’—p. 101.

An incongruous image.

‘Gather flowers, &c.,’ p. 50. See above. We deny that the buds ‘are not ours’—that they ‘grow’ only ‘for others;’ they are as much ours as are the full-blown flowers. Nature mingles them together for our enjoyment; and art, in this respect, should imitate nature. A nosegay is deficient unless there mingle in it

‘The budding rose beneath the rose full blown,’

as Wordsworth has it.

We have specified all the faults that occur to us in any of these poems, (the ‘humorous’ ones always excepted,) and they are not many, after all. The excellencies, on the other hand, are many and marked.

The first poem, and the longest of the non-‘humorous’ ones, is on a classical subject—

‘The tale  
Of young Narcissus and sad Echo’s tale,’

as the *motto*, from Keats, expresses it—and has the genuine classic *aroma*; as witness the following:

‘When the beauteous phantom first  
On his ravished vision burst,  
He, mayhap, was not aware  
His own face was mirrored there:  
In the chrystal depths, alas!  
He but saw, as in a glass,—  
Lips parted, cheeks aglow,  
Flushed, for all the world, as though  
Roses were about to blow,  
Which had budded in the snow.

Ah! Narcissus, the transfusion—  
Replication—involution  
Of those false and real glances  
Self-idolatry enhances:  
Even should a chance beholder,  
Peeping, unseen, o’er thy shoulder,  
Now essay the *true* to sunder  
From their *simulacra* under  
Water, flushing into wine,  
With each rosy blush of thine,  
He would die in the endeavor,  
An idolater forever!’



We wish we had room for the whole. We commend to 'peerless maidens' the closing lines, beginning with

'Should'st thou, like Narcissus, guess  
Half of thine own loveliness,' &c.

Here is the last, but not the best, of ten stanzas to *Spring*:

'But I may not translate, with tuneless tongue,  
The vernal music all around me ringing;  
For birds sing now, as birds in Eden sung:  
Enough for me, to listen to the singing!'

Here is a whimsical image, but a true one, nevertheless—as those of us whose memories go back to pre-carboniferous times can testify, though it may have been hitherto unlanguageed to us:

'*Ring-worms* of fire in chimney-soot  
From single scintillations shoot;  
Each separate sparkle, ere it dwindles,  
A wider conflagration kindles,—  
Ignites incendiary tinder,  
Then dies into a sable cinder.'

The following, from the piece entitled *Love*, without being at all an imitation, still less coming up to it, reminds us, nevertheless, of Biron's description in *Love's Labor Lost*, Act iv., Scene 3, beginning,

'But love first learned in a lady's eyes,' &c.

'*Love* moves on earth—a page in *BEAUTY*'s train;  
He follows her,—a rapt idolater,—  
Gloats on her glances, feeds upon her smiles,  
Lights, with his lamp, her pathway through the dark,  
And keeps a lonely vigil while she sleeps;  
He only knows her worth, and spies in her  
A thousand graces others may not see:  
*BEAUTY* would live for him—*HE* die for her.'

Here is a picture of *Love among the Roses*, that would be hard to equal on canvas:

'He dreams beneath a drooping vine,  
Whose graceful trailers intertwine,  
Weaving above his head a woof  
Of dark green leaves and crimson flowers:

In vain through this umbrageous roof  
 May noontide sunbeams try to peep ;  
*Here*, time is told in twilight hours,  
 While infant beauty lies—asleep.  
 Gay birds and gorgeous butterflies,  
 Flash through these “purpling glooms,”  
 Where zephyrs woo, with plaintive sighs,  
 The hearts of hidden blooms ;  
 Yet heedless of their happy flight,  
 He slumbers still, serenely bright—  
 Transfigured in the shifting light !

We have space but for one more extract—the last five stanzas of *The Star above the Manger* :

‘ Age after age may roll away,  
 But on Time’s rapid river  
 The light of its celestial ray  
 Shall never cease to quiver.

‘ Frail barges on the swelling tide  
 Are drifting with the ages ;  
 The skies grow dark—around each bark  
 A howling tempest rages !

‘ Pale with affright, lost helmsmen steer,  
 While creaking timbers shiver ;  
 The breakers roar—grim Death is near—  
 O who may now deliver !

‘ Light—light from the Heraldic Star  
 Breaks brightly o’er the billow ;  
 The storm, rebuked, is fled afar ;  
 The pilgrim seeks his pillow.

. . . . .

‘ Lost—lost indeed his heart must be,—  
 His way *how* dark with danger,—  
 Whose hooded eye may never see  
 THE STAR ABOVE THE MANGER !’

We had forgotten to speak of the rhymes. There are fewer imperfect, or, as the phrase is, allowable ones, than in the standard poets ; but there are a few, nevertheless. Among these are *first* and *burst*, p. 3, and *erst* and *burst*, p. 10, both of which most persons seem to think perfect rhymes—which they are certainly *not* ; *hearth* and *birth*, p. 29, is not even an



allowable rhyme: the only English monosyllable rhyming with *hearth*, that we can recall, is *garth*; *pure* and *wooer*, pp. 56, 57, is a very licentious rhyming, and *borders* and *marauders*, p. 24, as also *gladder* and *shadow*, p. 51, no rhyming at all.

5.—*MOPSA, THE FAIRY*. By Jean Ingelow. With illustrations. Boston: Roberts & Brothers. 1869. For sale by Cushings & Bailey.

What exceedingly stupid person was it who thought it necessary to write a *Mother Goose* for grown folks? as if, forsooth, *Mother Goose* the veritable were not for grown folks.

We confess we have no sympathy with those who pretend not to like the *Arabian Nights*. Ten to one they keep a copy of these wonderful stories in a secret drawer. For us, we delight, at suitable times and proper intervals, to take up a fairy-book and, giving the imagination fresh rein, to gallop off on a magic horse, moved by a wooden peg, or mount a Griffin and visit the realm of fancy. Such a pleasure we had during the hour we spent with Jack and Mopsa. We did not hesitate, with reckless faith to mount the Albatross behind Jack, to take a cosy corner in his wonderful boat, and to follow, at a respectful distance, as he and his Mopsa, become queen, raced across the hills in search of the wonderful castle. In short, we believed fully in Jack and Mopsa, and we do so still. We did not search for moral or interpretation; what sensible man or boy ever does in a fairy story? Everybody who has the *ideality* to enjoy such things, will find Jean Ingelow's *Mopsa* a treat. In its liteness of fancy and grace of conception, it reminds us sometimes of that model of fairy stories, *Der neue Paris* of Goethe.

6.—*BEGINNING GERMAN*. By Dr. Emil Otto. New York: Leypoldt & Holt. F. W. Christern. 1869.

Otto's series is so well known in this country, that it is not necessary to say more of the book in hand, than that it is executed with the care and accuracy which Dr. Otto has always shown in the preparation of his books. Whatever may be thought in our high schools and colleges of his method of teaching modern languages, no doubt can be entertained that his multitudinous repetition is the only thing for young beginners.

- 7.—NEW GUIDE TO GERMAN CONVERSATION. By L. Pylodet. New York: Leopoldt & Holt. F. W. Christern. 1869.

We have no faith in phrase-books. They result in little more than ludicrous mistakes on the part of those who try to converse by their help. This book is about like the rest of its class, perhaps a little better. It contains something of grammar, the usual lists of words, lists of idioms, forms for letters, &c., &c.,—all arranged after the most approved system of teaching modern languages, namely, that which discards all method in grammar.

- 8.—A COMPENDIOUS GRAMMAR OF ATTIC GREEK, WITH COPIOUS EXERCISES. By Charles D. Morris, M. A., late Rector of Trinity School, New York, and formerly Fellow of Oriel College, Oxford. New York: F. J. Huntington & Co. 1869.

We have here, in the brief compass of 155 duodecimo pages, large and beautifully clear print, the essentials of (Attic) Greek Grammar, presented in a masterly analysis of the '*facts* of the language;' the author having 'resolutely forborne to insert *explanations* of facts, however interesting, which did not seem (to him) to render the apprehension of the facts themselves more easy.'

There is one point in which this grammar differs from every other that we are acquainted with, to wit, that 'all inflected words are not only referred to their respective stems, but are *uniformly spoken of under that form.*' Thus, in the several brief vocabularies interspersed through the work, we have *χρητά*-, *λόγο*-, *νόμ*τ-, *ἐσ*-, *ἐ*-, &c., instead of *χρητής*, *λόγος*, *νόμ*ς, *εἰμί*, *εἶμι*. 'This feature,' the author says in his preface, 'cannot here be defended at length.' It needs no defence. On the contrary, it is the most admirable feature of the book; for it *compels* the pupil to become familiar both with the stem and with the *regular* formation from it of the nominative singular of the noun or adjective, or the first person singular of the present indicative active of the verb, as the case may be.

Another excellence of the book is, the manner in which anomalies of inflection are treated. In a tabular *conspectus*, embracing as many columns as there are cases possibly distinct in form, (that is to say, five in the singular, four in the plural, and two in the dual,) are exhibited to the eye, at a glance, the



anomalies, and *only* the anomalies, of 96 nouns or adjectives, and in another and similar *conspectus* those of 301 verbs. Thus, in the words of the preface, 'an arrangement has been adopted, which will stop instantly the progress of any pupil who has not mastered the regular formation.'

Brief as the grammar is, eight pages are given to Accentuation, and two to Contractions. The Syntax occupies fifty-two pages, and is at once concise, lucid, and (for the purpose) full. In short, the grammar contains, with the exception of Prosody, and dialectic inflections, everything that is needed in preparing for College, or that will be of any use to three-fourths of those who go through the customary undergraduate course.

Appended to the grammar is a *Praxis of Forms*, and a collection of *Exercises*, extending through seventy-eight pages, the English being given on the left-hand page, and the *stems* of the corresponding Greek words over against it on the right-hand page; so that the attention of the learner is *concentrated* upon the inflection-endings, to the exclusion, for the time being, of everything else. This is as it should be. Then follow twenty-six pages of *Reading Lessons*, which are neither more nor less than the previous Exercises, save that what was there given in the stem, is here given in the full form; so that the boy, in preparing, for instance, the exercises on page 179, has but to turn to page 256 to find the work done to his hand. This is as it should not be. It turns the getting of a lesson, from an exercise of judgment, into an exercise of mere memory; perhaps not even that, if the boy thinks he can manage, in recitation, to refer from the one page to the other, on the sly; and most boys are in this respect born jugglers. It is true, Mr. Morris tells us in his preface that 'any teacher, anxious to do his duty, can easily prevent illicit reference to another page;' but from this we only infer that the boy-millennium has come in New York. Here, in Maryland, it is yet a good way off; and, in consequence, the 'prevention' in question is anything but 'easy.' Besides, the *Lessons* are superfluous. The boy should make his own Lessons, first on the blackboard, and then in a book. As for the teacher, if he is fit for his place, he will need no other *Lessons* than the *Exercises*. If

Mr. Morris will leave out the *Lessons*, and give in place of them a concise *Prosody*, and the dialectic *inflections* that occur in writers other than Attic, we will give his book an unqualified commendation.

- 9.—MANUAL LATIN GRAMMAR. Prepared by William F. Allen, A. M., Professor of Ancient Languages and History in the University of Wisconsin; and Joseph H. Allen, Cambridge, Mass. Twelfth Edition. Boston: Published by Edwin Ginn. Chicago: Fred. B. Ginn. 1869.

That a Latin Grammar should reach its twelfth edition in less than thirteen months, is presumptive evidence of its excellence, and he who procures this Grammar on the strength of that presumption, will not be disappointed. It is in truth a work of rare excellence. It does for the study of Latin all (with one exception) that Morris's Grammar does for Greek, and one thing that Morris's Grammar does not do; and all within the compass of 138 duodecimo pages, ('Supplement,' of 18 pages, included) of clear and attractive print, such as must make it a pure pleasure to a boy, in spite of the hard study required, (for neither Greek nor Latin can be got without hard study,) to get his lesson out of it. Were 'all inflected words,' in Allen's Grammar, as in Morris's, 'not only referred to their respective stems,' but 'uniformly *spoken of* under that form,' and had Morris's Grammar a *Prosody* as concise and (for the purpose) ample and admirable as that of Allen's, we should want nothing more, not only for beginners, but for at least three-fourths of the undergraduates in our colleges. For the other fourth, Madvig's Latin Grammar, which, we are happy to see, the same publisher has in press, and Hadley's Greek, will furnish all that most of them will have leisure or disposition to profit by.

- 10.—LATIN LESSONS ADAPTED TO THE MANUAL LATIN GRAMMAR, Prepared by Wm. F. Allen, A. M., Professor, &c.; and Joseph H. Allen, Cambridge, Mass. Third Edition. Boston: Published by Edwin Ginn. Woolworth, Ainsworth, & Co. Chicago: Fred. B. Ginn. 1869.

We wish we had space—it would take at least two or three pages—to set forth the peculiar excellences of this little book of 134 pages, 'Vocabulary' included. We can only recommend in the strongest terms to every teacher not committed against change, to get the book and examine it for himself; and even



those who are committed against change, should for that very reason get the book; for if they adopt it, as they will be pretty certain to do if they once examine it, they will not be likely again even to wish to change. We weigh our words when we say that we consider it altogether superior to all the *Latin Lessons*—and they are not few—that we have ever used or seen.

- 11.—A LATIN READER: consisting of Selections from Phædrus, Cæsar, Curtius, Nepos, Sallust, Ovid, Virgil, Plantus, Terence, Cicero, Pliny, and Tacitus. With copious Notes and Vocabulary. Prepared by William F. Allen, A. M., Professor, &c.; and Joseph H. Allen, Cambridge, Mass. Boston: Published by Edwin Ginn. Chicago: Fred. B. Ginn. 1869.

We were not a little alarmed as our eye fell for the first time on two words of the above title; but on turning over the pages of the book, we soon found that 'Copious Notes' in the vocabulary of our authors, meant only 93 pages of Notes to 213 of Text, instead of, as with Anthon, four or five hundred! And yet the Notes are copious, for they explain, so far as we can judge from a cursory examination, all that needs explaining, and in the briefest possible language; often by a simple reference to the *Manual Grammar*. Take a specimen or two from the notes on Quintus Curtius:—otium, *a halt*;—sine memoria, *without putting her in mind*;—puderet, § 64, II.—ipsos for se; quite common in Curtius; (this use of *quite* for *very*, by the way, is quite common in this country, and Webster says it is 'not uncommon in England.' Evil communications corrupt good manners;—his; we should expect sibi;—de rege, *who should be king*, &c.

The Selections are made with judgment, though we miss some from Ovid, that we should like to have met; we suppose there was not room for them.

- 12.—A MANUAL OF THE ART OF PROSE COMPOSITION. For the use of Colleges and Schools. By J. M. Bonnell, D. D., President Wesleyan Female College, Macon, Ga. Louisville, Ky.: John P. Morton & Co. 1869.

We noticed the first edition of this work in the *Southern Review* for January, 1868, and, while commending it on the whole, pointed out numerous instances in which the author had been hypercritical. The present edition is an improvement on the former; but there is room for more improvement. 'Quandary,' and 'brat,' have been removed from the 'List of

Provincialisms;' but 'shilly-shally,' and 'humdrum,' and 'grab,' and at least a dozen other good English words, not one of which is a 'Provincialism,' are still in the list. Nevertheless, the book is a good one, for its purpose; only, it must not be taken for an infallible guide in regard to 'Provincialisms,' and 'Obsolete Words,' in which latter class are to be found more that are still in use than that are really obsolete.

- 13.—GOODRICH'S SIXTH SCHOOL READER. Edited by Noble Butler, A. M. Louisville, Ky.: John P. Morton & Co.

The preface to this book tells us that it 'is intended for the use of the most advanced classes.' Such being the case, at least half of the 500 pages should have been given to the standard writers of the 16th and 17th and first half of the 18th centuries, instead of the whole work being given up, almost exclusively, to those of the latter part of the 18th and of the 19th. In his anxiety 'to make it a *live* book'—we quote from the preface—the compiler has adapted it to the more (or less) rather than to the 'most' advanced classes.

- 14.—THE SCIENTIFIC BASIS OF EDUCATION, Demonstrated by an Analysis of the Temperaments and of Phrenological Facts, in connection with Mental Phenomena and the Office of the Holy Spirit in the Processes of the Mind: In a Series of Letters to the Department of Public Instruction in the city of New York. Second Edition. By John Hecker. New York: A. S. Barnes & Co. 1868.

We have not had time to give this work a thorough examination, but a cursory glance has satisfied us that there is in it a singular mixture of good and bad. We commend it to the careful consideration of all concerned in education, and heartily endorse Professor Atwater's commendation; especially the closing sentence, which advises all teachers to *master* it, but not to *be mastered* by it.

- 15.—ORDER AND CHAOS; a Lecture, delivered at Loyola College, Baltimore, in July, 1869. By T. W. M. Marshall, Esq., Author of *Christian Missions*. Baltimore: John Murphy & Co. 1869.

'Order,' in this Lecture, stands for 'the Catholic Church;' 'Chaos,' for 'Protestantism.' Mr. Marshall's mastership of English does credit to the University of which he is a graduate. The chaste and beautiful style in which the pamphlet is gotten up is deserving of special mention. In everything in



bookmaking, that appeals to the cultivated eye, Mr. Murphy is unsurpassed by any American Publisher.

16.—COLLEGE EDUCATION. (From Lippincott's Magazine, April, 1869.) By Geo. H. Calvert.

This pamphlet deserves a more extended examination than we can here give it. Agreeing with Mr. Calvert that not more than one-fifth, or at most one-fourth, of the undergraduates of our Colleges will even approximate to a mastery of the languages of Greece and Rome, we, yet, do not agree with him that to some even of these 'the time given to Greek and Latin will be time wasted,' and that 'to the other three-fourths it would be not a waste, but a robbery.' But we have not time or space to go into the examination at present.

17.—JULIUS CÆSAR: Did he Cross the Channel? Reviewed by John Wainwright, Member, &c. London: Published by Russell. 1869. Philadelphia: J. Campbell.

It appears that the Rev. Scott F. Surtees, Rector of Sprotsburgh, near Doneaster, Yorkshire, England, wrote a pamphlet entitled, *Julius Cæsar—Did he Cross the Channel?* in which he maintained that Cæsar did not, nor ever set eyes on Deal or Dover. To elucidate and defend the contrary, which has been so long and so universally entertained, is the object of this publication. And in doing this, the author has successfully acquitted himself—proving clearly Cæsar's narrative in his Commentaries to be true.

18 —REMINISCENCES OF FELIX MENDELSSOHN-BARTHOLDY, A SOCIAL AND ARTISTIC BIOGRAPHY. By Elise Polko. Translated from the German by Lady Wallace. New York: Leypoldt & Holt. (Kelly, Piet & Co., Baltimore.)

Music-loving people will always be interested in anything relating to the gifted man who is the subject of these Reminiscences. This work, however, is, on the whole, rather disappointing. Where there is too much enthusiasm there is generally too little discrimination. In reading a biographical or historical work, nothing takes off the edge of interest so much as the conviction that things were not as they are represented. And yet, when we see adjectives in the superlative degree scattered profusely over the pages, an impression disagreeable to entertain and unfavorable to the book, will creep into the mind that it is not all true. Truth seems to have a great respect for



the positive degree, and to prefer wearing it, as an habitual dress.

The career of Mendelssohn gives us that idea of beauty and completeness with which we leave the contemplation of few lives. Indeed, such a life is more a poem than a reality. He had genius of a high order without its eccentricities, and he was apparently free from that morbid sensitiveness which is generally found united with poetic or musical talent. He spent his life in the midst of rehearsals and concerts and St. Cecilia associations; and that life was almost exempt from the small passions and jealousies, which vex the existence of such assemblages. The same backbitings and heart-burnings, which keep village choirs in a state of strife and commotion, afflict other and more pretentious societies engaged in the cultivation of the concord of sweet sound. It is to Mendelssohn's praise that in the orchestras, over which he held sway, there was a concord of tempers as well as of sounds. The unfortunate estrangement between him and the poet Immerman, is the single instance in which he seems to have displayed any bad blood. We catch in this, as in most books of Reminiscences, many views of social life. How the people of other countries live and associate amongst themselves, how people devoted to the pursuit of an art pass their social moments, are things which always afford instruction and entertainment.

19.—THE MARYLAND SERIES OF READERS: The First, Second, Third, Fourth, and Fifth Readers. By M. A. Newell and Win. R. Creery. Baltimore: Kelly, Piet & Co. [No date.]

The above series of readers, though received some time since, cannot have justice done them in the present number of *The Southern Review*. It is, indeed, no light task to prepare a careful and conscientious notice of such school-books; for as, in such cases, all merit is relative, no one has a right to pronounce on the educational value of any one series without a knowledge of the character of all its competitors for public favor. In our next issue, however, the above Series, from the enterprising house of Kelly, Piet & Co., of our own city, Baltimore, will receive an extended and elaborate notice.

20.—THOUGHTS BY THE WAYSIDE. By Dixie. Memphis: Southwestern Publishing Company. 1869.

A number of Notices are crowded out by want of space.



# THE SOUTHERN REVIEW.

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